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ABSTRACT

This report examines the outcomes of economic reform in Uganda and defines issues that Uganda must address in medium- and long-term strategies for poverty reduction. With a per capita income of approximately $220, Uganda is one of the poorest countries in the world. Its economy and social indicators bear the marks of nearly 15 years of political turmoil and economic decline. Serious educational and health problems include low levels of educational attainment and adult literacy, high rates of child mortality and malnutrition, the AIDS epidemic, and high incidence of malaria and tuberculosis. Since 1987, the government has been implementing an economic reform program that aims to promote prudent fiscal and monetary management, improve incentives to the private sector, reform the regulatory framework, and develop human capital through investment in education and health. Specifically, this report examines how growth benefits are distributed among people and the extent to which growth promotes provision of public social services such as education. The report first analyzes the medium-term macroeconomic policy agenda and structural and institutional reforms, with the objective of sustaining and strengthening stability. It then reviews the prospects for rapid and broad-based economic growth focusing on issues related to private investment, export development, infrastructure, and human resources. The latter includes a discussion of public policies and services in health and education. The appendices include an analysis of the status and changes in poverty during the adjustment period, including rural-urban differences, macroeconomic projects, and detailed statistical data from the 1991 Population and Housing Census. Contains 59 references, 34 data tables and figures, and a map of Uganda. (LP)

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Uganda

The Challenge of Growth and Poverty Reduction

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A WORLD BANK COUNTRY STUDY

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Uganda

The Challenge of Growth and Poverty Reduction

The World Bank
Washington, D.C.

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ACRONYMS AND ABBREVIATIONS

ADB	African Development Bank
BOP	balance of payments
BOU	Bank of Uganda
CIF	cost, insurance and freight
CMB	Coffee Marketing Board
COMESA	Common Market for Eastern and Southern Africa
CPI	consumer price index
DFCU	Development Finance Corporation of Uganda
DRC	domestic resource costs
EPADU	Export Policy Analysis and Development Unit
ESAF	Enhanced Structural Adjustment Facility
EU	European Union
FOB	free on board
FY	fiscal year
GDP	gross domestic product
HBS	Household Budget Survey
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IHS	Integrated Household Survey
IMF	International Monetary Fund
IVA	international value added
LMB	Lint Marking Board
MAAIF	Ministry of Agriculture, Animal Industries and Fisheries
MFEP	Ministry of Finance and Economic Planning
MP	market prices
MUV	manufacturing unit value
NGO	nongovernment organization
NTAE	nontraditional agricultural exports
ODA	Overseas Development Association (U.K.)
OECD	Organization for Economic Cooperation and Development
PAPSCA	Program to Alleviate Poverty and the Social Cost of Adjustment
PTA	Preferential Trade Area
QR	quantitative restriction
RC	resistance council
REER	real effective exchange rate
SSA	Sub-Saharan Africa
TOT	terms of trade
UCB	Uganda Commercial Bank
UCDA	Uganda Coffee Development Authority
UIA	Uganda Investment Authority
URA	Uganda Revenue Authority
USAID	United States Agency for International Development
VAT	value added tax

GOVERNMENT FISCAL YEAR

July 1 - June 30 (FY93 and 1992/93 = July 1, 1992 to June 30, 1993)

CURRENCY EQUIVALENTS

Currency Unit: Ugandan shilling (U Sh)

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EXECUTIVE SUMMARY

1. With a per capita income of about US$220, Uganda is one of the poorest countries in the world. Its economy and social indicators bear the marks of nearly 15 years of political turmoil and economic decline. Since 1987 the Government has been implementing an economic reform program supported by a large number of donors. The program aims to promote prudent fiscal and monetary management, improve incentives to the private sector, reform the regulatory framework, and develop human capital through investment in education and health.

2. Uganda's economic recovery and macroeconomic stabilization have been successful, and a number of structural and institutional reforms have been initiated during the past few years. These achievements present a window of opportunity for a strong private investment response and export diversification. Otherwise there is a danger that the achievements could unravel if Uganda remains vulnerable to commodity booms and busts.

3. Per capita GDP has grown at the average rate of about 3 percent since 1987. As traditional and emerging cash crops are an important income source for all income groups, liberalization of agricultural markets, which has substantially increased farmgate prices, has benefited both the poor and the better off. Good growth performance and recent improvements in coffee prices have led to a decrease in hard-core poverty. However, available data for 1992/93 show little change in overall poverty incidence.

4. Uganda faces a number of development challenges which require government action. First, *infrastructure* remains inadequate. Despite the initial rehabilitation phase in the latter part of the 1980s, power, telecommunications and other infrastructure require substantial deepening and expansion in order to foster private investment in productive capacity. Infrastructure investment is typically government's responsibility but, given its fiscal constraint, private sector participation is necessary, most naturally in utilities. Distribution of and access to infrastructure are also important issues. Rural areas, which account for 50 percent of economic activity in Uganda, require substantial investment in infrastructure, particularly roads, directed towards areas of good agricultural potential. This is a prerequisite for a strong and broad-based supply response, provided a stable macroeconomic framework remains in place.

5. Second, investment in *human capital* is inadequate. Combined with poor health and nutritional status, low educational attainment remains one of the main constraints to growth and poverty reduction. Despite relatively high gross enrollment rates in primary education, drop-out rates are also high. There are at least two reasons for the high number

of drop-outs: the quality of education is poor and a large number of Ugandan families find the cost of education, including primary, prohibitive. Externalities and equity considerations call for increased public sector participation in the provision and financing of education and for ensuring that the quality of private providers is adequate. Similarly, there is a need to address the problem of adult illiteracy, high levels of malnutrition, and to shift resources from curative to preventive health.

6. Third, broad-based rapid growth requires effective government and community-based *institutions*. On the government side, the on-going civil service reform has been successful in improving efficiency of the service but a lot remains to be done in order to have a lean and effective civil service in place, compatible with available public resources. A broad decentralization program is underway which influences the way in which the civil service reform progresses. Eventually districts are expected to assume responsibility for as much as 80 percent of service delivery. Therefore, the next phase of the civil service reform will involve a further review of the size and functions of the central government ministries and agencies. Another goal is an adequate pay structure, combined with improved performance and efficiency. There is also a need to establish a transparent system of intergovernmental transfers for both recurrent and development expenditures, carry out an assessment of the potential for local taxation and to improve service delivery to the public. Other institutional challenges that are vital for private sector development and require urgent action are financial sector reform (see below), public enterprise reform and privatization, and strengthening of the legal system.

7. As public resources are limited, cost-sharing with the private sector is needed. It is, however, important to ensure that locally raised fees are used to improve service delivery. Private and public partnership is also important, for example, in the development and dissemination of agricultural technology. Private initiative should be encouraged where incentives are right, while the government's efforts should focus on the areas where the private sector has no incentive to participate, such as food crops typically grown by the poor.

8. This Country Economic Memorandum takes stock of the outcomes of reforms in Uganda and defines the next generation of issues that Uganda must address in its medium- and long-term strategy for poverty reduction. The thrust of this strategy is the promotion of broad-based economic growth and increased investment in human resource development.[1] The two are interlinked. More specifically, the importance of growth lies in the way that its benefits are distributed between people and the extent to which growth promotes provision of public social services. As macroeconomic stability is a necessary condition for strong growth performance, the report first analyzes the medium-term macroeconomic policy agenda and structural and institutional reforms, with the objective of sustaining and strengthening stability. It then reviews the prospects for rapid and broad-based economic growth focusing on issues related to private investment, export

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1 World Bank (1993a); Anand and Ravallion (1993).

development, infrastructure and human resources. The latter includes a discussion of public policies and services in health and education. Finally, a poverty update in the annex analyzes the status of and changes in poverty during the adjustment period.

MACROECONOMIC POLICY AGENDA

9. **Continue Tight Fiscal Policy**. Uganda is currently well served by a tight fiscal policy which, with ongoing monetary deepening, keeps inflation relatively low. The traditional sources of monetary instability—monetization of the fiscal deficit and excessive overdraft facilities at the central bank—have been controlled and the quasi fiscal deficits checked. The policy of public expenditure restraint, which increases fiscal savings when foreign aid or tax receipts exceed the planned public expenditure level, acts as a powerful force for stabilization. As the Government is likely to receive once-and-for all revenues, such as funds accruing from divestiture of publicly owned assets or windfall tax revenue, it must ensure that such revenues do not result in expenditures that lead to unsupportable future claims on the budget.

10. **Increase Public Revenue**. During the past few years, fiscal deficits have been financed solely by grants and concessional foreign borrowing. One of the most critical issues for long-term macroeconomic stability is to increase public revenue. Otherwise, there is a risk of inflation which could discourage private investment, reduce capital inflows, and adversely affect poverty. Government must step up tax reform and extend the planning horizon of tax policy to at least the medium term. Tax reform should focus on three main issues: dismantling the dispersed system of duty, sales tax, and excise tax exemptions and replacing them with low, uniform rates; broadening the tax base, including the local revenue effort; and seeking to shift from a reliance on foreign trade taxes toward VAT and direct taxes. Improving the local revenue effort will require a substantial improvement in service delivery. This can be assisted by donors who can jump-start the process of improving services, which in turn can lead to an improvement in the local tax effort.

11. **Increase Public and Private Saving.** Rapid growth could well start a virtuous circle of increased savings and investment which further support high growth. Increased public revenue would allow higher public savings, while rationalization of the tax system and its effective and fair implementation would promote private saving by firms. In order to increase overall private savings, financial sector reform is indispensable. Until now, reforms in the financial sector have been implemented unevenly and major new risks have emerged. The commercial banking system is in a precarious state: more than half of the banks made losses in 1994, and they have a large negative core capital. A number of banks are insolvent, including Uganda Commercial Bank (UCB). Aggregate nonperforming assets are in excess of 50 percent of total loans making much of banking activity nonviable. Banks lack financial discipline and administrative efficiency which has resulted in extremely high intermediation costs. These costs impose a significant burden on borrowers. The financial position of the Bank of Uganda is also untenable because of foreign exchange and other past losses. The complexity of the problems, given

the institutional capacity, calls for a focused approach. Immediate action is required on four fronts: privatizing UCB expeditiously; adopting a more aggressive approach in dealing with distressed private banks; strengthening the central bank; and adopting more prudent lending policies.

12. **Management of the Coffee Boom.** Successful management of external trade shocks keeps inflation low and the exchange rate stable. Booms and the way they are managed also have a direct impact on investment. Because coffee is an important source of income for the poor in the main coffee growing areas, boom management is linked to poverty reduction. Empirical evidence from other Sub-Saharan African countries suggests that the private sector typically saves a large part of *transient* income. Savings and investment can secure a sustainable increase in consumption. At the onset of the boom, savings tend to be in *financial assets,* in practice money and bank deposits. Subsequently, savings are likely to be invested so that the demand for assets would shift to *real assets.*

13. Given the private sector's likely response to the boom and the objective of avoiding unnecessary currency appreciation, the central bank must accommodate the private sector's increased demand for money by accumulating reserves. This policy has worked well in the current coffee boom: appreciation has been minimal, while inflation has been about 5 percent. Likewise, reserves can be decumulated when inflation shows signs of picking up—an indication that people have shifted from financial assets (money) to real assets. Export taxation, which was reintroduced in 1994 on coffee as a stabilization measure, could have a relatively high opportunity cost in terms of foregone private investment. In order to manage booms in the future, it is important to ascertain how the private sector in Uganda responds to windfall income. If the propensity to save is shown to be high in 1994-96, future stabilization may not require taxation apart from the central bank's intervention to accumulate and decumulate reserves. Financial sector reform is, however, important for boom management, since it would allow financial instruments other than money to become more important.

14. **Future Borrowing Only on Highly Concessional Terms.** Uganda faces a serious debt overhang. The solvency ratio, which is the net present value of debt over exports, based on the December 1994 stock of debt without new commitments, would decline from 450 percent before debt relief to 318 percent if the terms of the February 1995 Paris Club agreement are extended to all bilateral debt and some multilateral debt is prepaid. A country with a solvency ratio of higher than 200 is considered to be severely indebted. Although Uganda's ratio may be overstated because of underreported exports, its high level underlines the importance of further debt relief, rapid export growth, and borrowing on only highly concessional terms. Since the prospects for further debt relief may be limited, the critical determinants of debt sustainability are the terms of new financing and export growth.

15. **Continue Improving the Incentive Regime.** Export growth will be important for overall growth as well as debt sustainability. Trade and foreign exchange reforms since 1987 have resulted in a substantial reduction in the antiexport bias. The *effective rate of protection* is a useful measure for assessing whether the reduction has been adequate. Using the current tariff structure, protection levels in Uganda turn out to remain quite high with respect to extra regional competition, ranging from well over 200 percent for a number of products sold in the domestic market to negative rates in export sales. On average, the effective rate of protection is around 90 percent in domestic sales and -16 percent in extra regional export sales. As PTA tariffs are lower, most industries are less protected in this market than in the domestic market. The average PTA rate of effective protection is more than 60 percent, however. Duty, excise tax, and sales tax exemptions on imported inputs further aggravate these protection rates. Duty drawback schemes are designed to eliminate the negative effective rates of protection on exports. A scheme is available for Ugandan producers, but it needs to be made operational and effective.

16. Despite wide-spread exemptions, it is estimated that 37 percent of the CIF value of imports are actually collected as taxes on imports (duties, excise and sales taxes); petroleum products represent two thirds of all customs duties collected. The ultimate incidence of high taxation of imports is shifted largely to Ugandan exporters, who as price-takers in their markets are unable to pass on these additional costs to consumers, as can those producers selling in the domestic market. Evidence from other countries shows that the share of import taxes being paid by exporters varies from about 50 to 90 percent. The highest incidence was in Colombia, which in the 1980s had a similarly structured economy as Uganda today, with a large share of coffee in total exports.

17. To reduce the antiexport bias the following measures are recommended: (i) reducing the level and dispersion of import taxes; (ii) abolishing the duty, excise, and sales tax exemptions granted under the Tariff and Investment Codes, statutory instruments, and *ad hoc,* and replacing them with low and uniform tariff rates; (iii) improving the operation of the duty drawback scheme and its extension to inputs not directly imported by the exporter in a simple, uniform, and transparent manner, and (iv) shifting reliance from import taxes towards VAT and direct taxes during the next decade.

18. **Export and Investment Response**. The low level of private investment and the apparent lack of interest in export activities are worrying. Aggregate investment as a share of GDP has been lower in the 1990s than in the latter part of the 1980s. Furthermore, private investment has concentrated on import-substituting activities. According to a recent survey of a large number of domestic firms, only 8 percent of these firms' output was exported in 1995, mainly to regional markets, compared to 7 percent in 1991. However, there is also evidence of a distinct increase in nontraditional exports during the past few years, albeit from a very low base. The remaining antiexport bias in

the economy can go a long way in explaining the sluggish export response—magnified by the appreciating shilling in 1993-94—prior to the coffee boom.

19. **Invest in Infrastructure and Skills.** Despite the sluggish investment response, there are some positive factors which may be able to improve the present trend. According to a 1993 survey of actual and potential foreign investors, for example, reform of the regulatory and incentive environment has made Uganda more attractive to investors than many other African countries. Nonetheless, the risk of policy reversal, political instability, and lack of infrastructure in power and telecommunications were perceived as major deterrents. This calls for both public and private investment in utilities, given the public revenue constraint. Compared with Kenya, Uganda's greatest disadvantage was perceived to be in the labor market. Its shortage of skilled workers and management capacity reflects past neglect of education and the exodus of skilled labor. This calls for accelerating human resource development as a long-term solution. In the short term this process can be assisted by educated Ugandans returning from abroad and by on-the-job training of the work force.

20. The limits to attracting foreign investment—apart from returning Asians who have been allowed to repossess their expropriated properties—makes domestic private investment all the more important. Domestic firms see the constraints to their future operation and growth as different than those cited by their foreign counterparts. Domestic firms feel that their most severe obstacle is high and non-transparent taxation followed by the cost of and access to finance. The banking system—both commercial and investment banks—is only equipped to lend very small amounts for investment. The culture of nonrepayment is well-rooted, and the judiciary does not regularly permit lenders to foreclose on collateral. Loans are like equity in that they carry a high risk and are not recoverable. Ugandan firms report that 70 percent of their capital is self-financed. Hence, the economy needs to generate high private savings and profits in order to get investment rates up. In the next two years this should happen, to an extent, due to the coffee boom, although the investments of farmers might not be easily detected in the national accounts.

21. **Support Nontraditional Agricultural Exports.** Traditional cash crops are still the mainstay of Uganda's exports and revival of these industries has been a significant element in the Government's effort to increase export revenue in the short term. In the absence of investment in the industrial exports sector, growth in the medium term would depend on nontraditional agricultural exports (NTAE). The prospects of future growth in the NTAE are good. Most important is the regional market for low-value staples, such as maize and beans, although the regional markets are volatile due to weather conditions and political uncertainty. Rapid growth is also expected in fish products and cut flowers. Export revenue from NTAE is anticipated to more than double between 1994 and 1998 to at least US$170 million by the latter year, provided product quality and farm-level and marketing efficiency can be increased. Expansion is also expected in pyrethrum, fresh fruits, vegetables and spices. During the past three years the total investment in nontraditional agribusiness is estimated at US$30 million which is still small compared to overall investment in the economy, which also remains quite low. Almost half of this

investment is in fish processing. Of the total export revenue from nontraditional agriculture in 1993 (US$56 million), 56 percent accrued to farmers and fishermen, many of whom were poor. Maize and beans accounted for 78 percent of the all NTAE receipts by primary producers, while fishing was 7 percent and sesame 6 percent. Cut flowers represented only 0.5 percent of the total earnings of farmers from NTAE.

22. Several policy measures to promote NTAE are suggested. First, measures to reduce the antiexport bias will have a positive impact on NTAE. Second, present land policies which adversely affect foreign investment in land-intensive activities should be reviewed. Third, a fisheries subsector analysis is urgently needed as existing and planned investment in the processing capacity, when in full use, would result in substantial overfishing. Fourth, there is an urgent need to improve handling facilities for fish and air cargo, to invest in the maintenance and construction of rural roads, to make distribution of improved planting material more effective and to strengthen efforts in export promotion, such as dissemination of market information, match-making between buyers and sellers, and improving product quality.

ACCELERATING BROAD-BASED GROWTH: RURAL INFRASTRUCTURE AND HUMAN RESOURCE DEVELOPMENT

23. **Invest in Rural Infrastructure.** Evidence from East and Southeast Asia suggests that provision of rural infrastructure has had a significant positive impact on growth and poverty reduction through increased agricultural output, productivity, and development of off-farm activities in rural areas. As labor-intensive economic growth is a necessary condition for poverty reduction in Uganda as well, these lessons are useful for formulating future policies to accelerate growth and reduce poverty.

24. Market-determined incentives for agriculture and nonfarm activities are found to be necessary to induce a supply response, but they are not sufficient to maximize that response. Governments have a major role in the development of infrastructure, without which growth will not take off. Empirical evidence also shows that higher agroclimatic potential and natural resource endowments are associated with both a higher level of infrastructure investment and a stronger development response to additional infrastructure. To maximize the economic benefit, investment in infrastructure should be directed to areas with significant growth potential.

25. Experience from East and Southeast Asia also suggests that a coordinated package of rural infrastructure—roads, telecommunications, electrification, water supply and banking facilities—is vital for stimulating rural nonfarm activities such as agroprocessing, commercial enterprises to produce farm inputs, basic consumer goods and services. One of the most critical of all rural and production-related infrastructure is the rural road network. Rural roads are typically public goods best provided by the government but their construction and maintenance can be contracted out to the private sector. It is important that local people have a voice in making road investment decisions. In Asia decentralization of road investments and maintenance has resulted in increased

utilization of local resources, better supervision of construction work and improved maintenance. In Uganda maintenance of the existing rural road network has been a major problem. Currently the responsibility for maintenance is being transferred from central to local government, which, hopefully, over time will improve the condition of these roads.

26. The poor derive indirect benefits from rural infrastructure to the extent it stimulates economic activity and increases the demand for local products and labor. To improve their direct access requires either reducing the cost of infrastructure (appropriate standards, low-cost and labor-intensive technology), or reducing the cost of using the infrastructure (low-cost transport services, or cross-subsidized electricity, for example). The poorest areas are in need of targeted public investment in social services and rural infrastructure to reduce hard-core poverty.

27. **Ensure Access to Rural Financial Services.** Good infrastructure can serve to attract financial services. Availability of credit, savings and financial transfer services in turn have been shown to have a strong positive impact on off-farm activities and employment. Currently, earnings from off-farm employment and nonfarm enterprises contribute a relatively modest share to the income of rural dwellers rising from 12 percent among the poorest, to 27 percent of total earnings of the better-off. As indicated above, the financial sector in Uganda is currently undergoing a major restructuring program, including privatization of Uganda Commercial Bank (UCB). This may lead to the closure of a large number of rural branches. Given the importance of these services to rural development, it is important to work out a transitional mechanism which will preserve rural access to these services following the privatization of UCB and before the emergence of a privately-owned rural branch network. The first step is to carry out a study which would determine a minimum set of locations where financial services should be available, institutional arrangements appropriate in providing these services, and whether an incentive scheme would be necessary to ensure that the minimum coverage of service will be available during the transitional period.

28. **Educational Attainment and Status of Health and Nutrition.** There was some progress in education even during the period of civil strife and economic mismanagement. Enrollment figures have increased. Figures from the 1992/93 Integrated Household Survey, which also include the private schools, suggest relatively high rates of *gross enrollment*, including primary gross enrollment as high as 91 percent (99 for males, 83 for females). However, these figures include an unknown proportion of older students and repeaters and hence the average attainment of children in primary education may be much less than they suggest. The figures also suggest that drop-out rates are high and there is evidence that they have increased over time. Of the primary cohort enrolled in 1986, 70 percent dropped out by P7 (only 10 percent in 1975). There is a significant gap between male and female enrollment. The paramount need is to improve the quality of teachers and to increase the availability of books. Communities are often more willing and able to pay for structures.

29. Nonetheless. the educational attainment of today's adult population in Uganda remains dismal. For instance, as many as 43 percent of those in the bottom expenditure quartile report having completed no level of formal schooling. Although literacy programs have not proven to be great successes and strong support for primary education is considered the best policy to combat illiteracy, the government should consider measures to improve adult literacy in the short term.

30. Health indicators in Uganda remain very poor. While Uganda compared well to other Sub-Saharan African countries in the 1960s, this is no longer the case. Economic decline certainly played a major part but improvement in some aspects of health are achievable at low cost and can be pursued now. Countries have achieved transformations in life expectancy even when incomes were low and not growing particularly fast. Adult mortality is currently very high in Uganda and likely to increase for some time because of the high rates of HIV infection. Other major adult killers include malaria and tuberculosis, both of which are likely to be on the increase. Although curative treatment for the latter two can be effective, the poor are less able to get access to adequate treatment. Therefore, it is crucial to develop a cost-effective system of rural clinics. Some recent work has found that children who are malnourished are much more likely to have mothers who are also malnourished than children who are adequately nourished. This suggests that nutritional and health problems in children reflect a more pervasive problem in the household.

31. An analysis using the 1992/93 Integrated Household Survey data confirms the overwhelming importance of female education in reducing fertility and *child mortality* (203 per 1,000 births nationally), and also shows that measures of mothers' beliefs about health are independently important. In general, female education may raise incomes and increase women's bargaining power within the household, but the evidence suggests that its effects on mothers' understanding about health are the most important channel. In particular, it is instrumental in reducing the population growth rate. Uganda is characterized by relatively high rates of stunting among children (over 40 percent in the two lowest expenditure quartiles), but low levels of wasting (around 7 percent), which points to chronic problems of nutrition in early childhood.

32. **Increase Investment in Human Capital.** Fiscal data indicate a significant increase in the shares of actual spending going to social sectors, particularly education during the adjustment period. Actual spending by the Ministry of Education stood at 18 percent of the total recurrent expenditure in 1992/93. Nevertheless, public expenditure on education is only two percent of GDP in Uganda, which is well below the Sub-Saharan African average of five percent. Raising salaries is a necessary condition for improved quality of social services. However, it is not a sufficient condition. Most observers agree that the ethos of public service has been damaged by the prolonged period of decline and both ethical and professional standards will need to be restored. There is also a need for a further analysis of the incidence of pubic expenditure in health and education.

33. The public sector has a crucial role to play in both health and education. The volume of public and donor resources provided to these sectors should continue to rise. The AIDS epidemic increases drastically the need for palliative care and also poses an enormous challenge to preventive medicine and education. For this reason Uganda should aim at a higher share of health expenditure than the typical developing country. While the progress made so far is encouraging, the share of health in the recurrent budget should be well above 10 percent, which is considered reasonable for comparable countries. The balance of public resources should move further in favor of the primary sector, particularly in health. Tertiary medical care should be publicly supported only where the referral system is effective, so that the majority of the population has access to it when needed.

34. User charges in both health and education are currently under discussion. In health, the government's White Paper advocates the introduction of user charges, but the current policy is to leave the decision to the districts. There is a strong economic case for subsidizing health care and education in Uganda. However, public resources are extremely constrained. Hence for health, the decentralization of the decision about user charges to the local level is appropriate. But user fees will only work if they are controlled by the local community and can be seen to improve the quality of services. Even then, too much should not be expected; user fees cannot replace public support. In education, targeting subsidies to vulnerable children in deprived areas is currently being considered. The Government is also planning to target P4-P7 to reduce the number of drop-outs.

35. Ensuring the quality of social services offered by the private sector is an important government responsibility. Quality control can be achieved in the education sector by a well-administered examination system. In health, the limited information available to patients provides a case for giving priority to the importation of cheaper generic drugs. The most promising avenue for stopping the illicit diversion of public resources is the active involvement of the district health committees. The authorities are acknowledging the role that can be played by traditional healers and seeking to educate and integrate them into the health system.

1
MACROECONOMIC PERFORMANCE AND THE ROAD AHEAD

1.1 With a per capita income of about US$220, Uganda is one of the poorest countries in the world. Its weak economy and its poor social indicators are the legacy of nearly 15 years of political turmoil and economic decline. Since 1987 the Government has been implementing an economic reform program supported by a large number of donors. The program aims to promote prudent fiscal and monetary management, improve incentives to the private sector, reform the regulatory framework, and develop human capital through investment in education, health, and other social services. Economic recovery and stabilization have been successful; hard-won macroeconomic stability has been maintained for the past three years. The stability is precarious, however; continuation of good policies and further improvement are therefore required.

1.2 Improving macroeconomic policies and sustaining stability are, of course, only part of the larger development effort to build institutions and infrastructure and implement social policies needed for broad-based growth and poverty reduction. But experience from other countries shows that a stable macroeconomy is necessary to attract private investment and sustain the high growth rate required for rapid poverty reduction. To reduce fragility, macroeconomic policy in Uganda, must in the next few years:

- Continue to maintain tight fiscal control
- Increase public revenue, including stepping up the tax reform
- Phase out gradually import support from recurrent public finance
- Increase public and private saving
- Reform the financial sector
- Manage the coffee boom to maintain low inflation and a stable exchange rate and to accommodate the private sector's response to the boom
- Manage external debt by seeking further relief and by borrowing only at highly concessional rates.

GROWTH, INVESTMENT AND SAVINGS

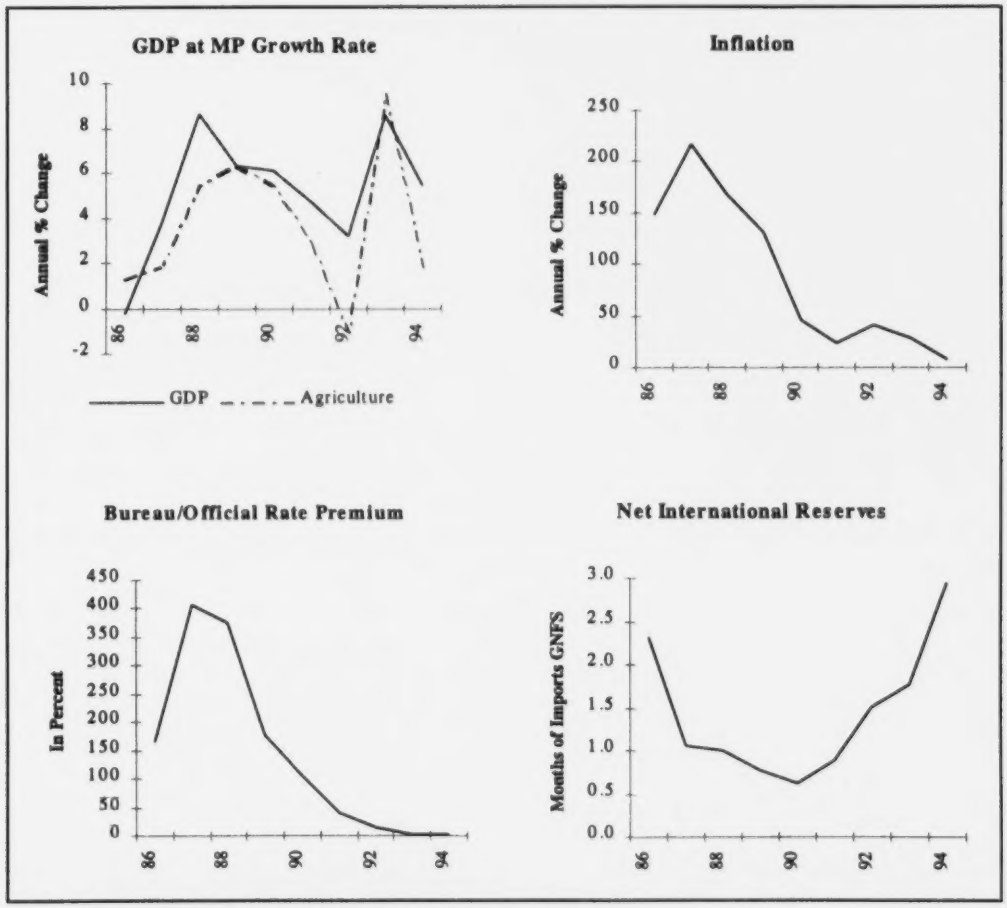
1.3 **Growth.** Investment is one of the most important elements of the growth process. Until recently Uganda's main sources of growth were recovering domestic consumption and, to an extent, regional demand and increasing capacity and land utilization. But the scope for expansion without a strong private investment response is likely to be limited.

1.4 Growth has picked up since 1987 but remains volatile and too modest, given the population growth rate, to substantially improve the living standards of most Ugandans in the near future. During 1993/94, real GDP growth slowed to about 5.4 percent compared

with 8.5 percent in 1992/93, mainly reflecting lower agricultural growth.[1] GDP grew by an average of 5.8 percent per year from 1986/87 to 1993/94, a gain of about 2.9 percent per capita per year. Reflecting the present coffee boom, the preliminary estimate for GDP growth in 1994/95 is as high as 10 percent. However, real GDP is still well below the level enjoyed by Ugandans 25 years ago.

1.5 Agriculture, which makes up close to 50 percent of GDP, dominates the growth figures, employs more than 80 percent of the labor force and accounts for virtually all exports (Table 1.1). The industrial sector, which includes agro-based industries, such as coffee, cotton, sugar, food processing, tobacco, and beverages, as well as manufacturing

Figure 1.1: PROGRESS IN ECONOMIC RECOVERY AND STABILIZATION



Note: Data are reported in fiscal years, MP refers to market prices.

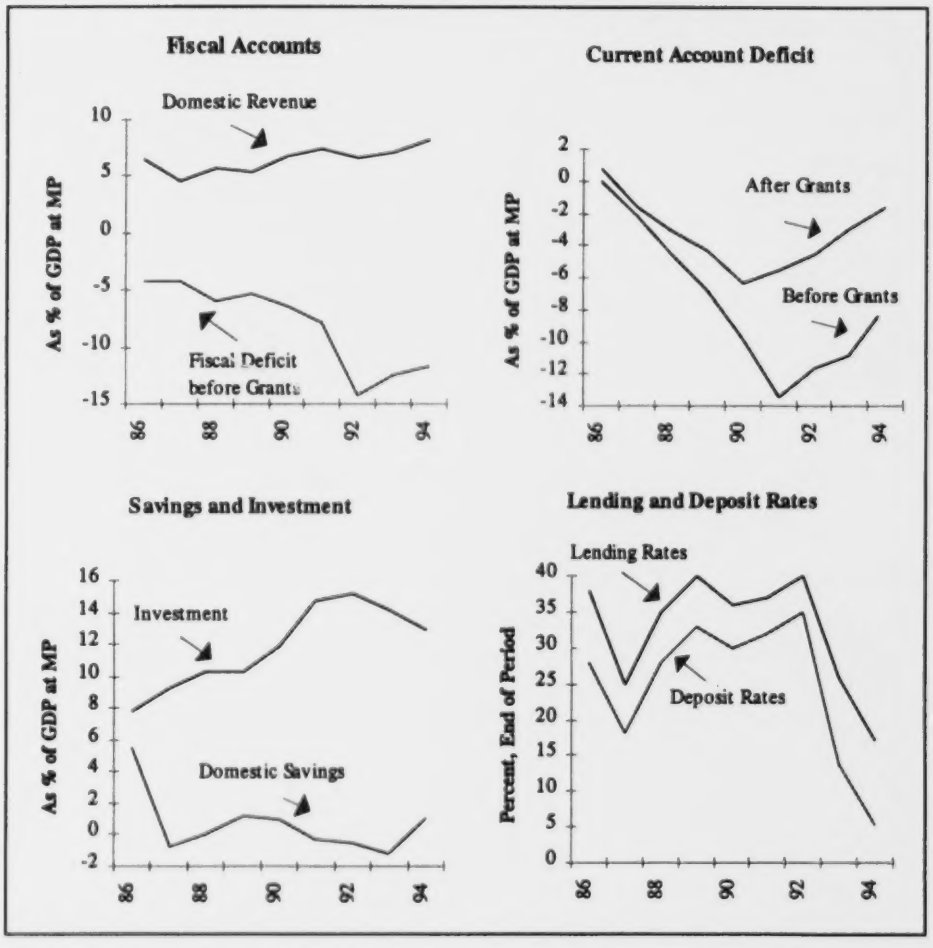
Source: Statistics Department, MFEP, BOU, IMF and staff estimates.

[1] National Accounts data are used based on the January 1995 revision by the Statistics Department, Ministry of Finance and Economic Planning. Subsequently, the 1994/95 growth rate estimate has been revised, indicating that GDP grew at the rate of 10 percent.

industries, produces mainly consumer goods for the domestic market and has been growing rapidly—between 7 and 19 percent a year since 1986/87—but from a very low base. The share of industry in GDP is around 13 percent. At about one third of GDP, the share of the service sector has not changed much over time. The nonmonetized economy, which is estimated to be around 30 percent of GDP, has grown slower than the monetized economy.

1.6 **Investment.** After the restoration of peace in 1986 investment recovered rapidly through 1989/90, driven by the rehabilitation of infrastructure and productive capacity. But investment as a share of GDP (at 1991 market prices) stagnated and then declined between 1991/92 and 1993/94 (Figure 1.2). Investment averaged around 20 percent of

Figure 1.2: KEY ECONOMIC INDICATORS



Note: Data are reported in fiscal years, MP refers to market prices.
Source: Statistics Department, MFEP, BOU, IMF and staff estimates.

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Table 1.1: KEY ECONOMIC INDICATORS (National Accounts)

Indicator	In Fiscal Years					
	1986	1990	1991	1992	1993	1994
	(As % of GDP at current market prices)					
Gross domestic product (GDP)	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture [a]	54.4	53.0	49.0	47.8	47.7	45.4
Industry [a]	9.7	10.8	12.6	13.2	12.8	13.3
Services [a]	29.9	30.3	32.4	33.4	33.4	33.9
Total consumption [b]	94.5	99.0	100.3	100.5	101.2	98.9
Gross domestic investment [c]	7.7	11.9	14.8	15.2	14.1	12.9
Public	2.0	4.1	5.7	7.0	7.5	7.2
Private (includes changes in stocks)	5.7	7.8	9.1	8.2	6.6	5.7
Exports (GNFS) [d]	11.3	6.0	6.1	7.2	5.5	6.1
Imports (GNFS) [d]	13.6	16.9	21.1	22.9	20.8	17.9
Gross domestic savings	5.5	1.0	-0.3	-0.5	-1.2	1.1
	(As % of GDP at constant 1991 prices)					
Gross domestic investment [c]	12.5	15.7	16.2	14.6	14.0	14.4
Public	3.5	5.6	6.2	6.8	7.4	8.2
Private	9.0	10.1	10.0	7.8	6.6	6.2
	(Real annual growth rates)					
GDP at market prices	-0.3	6.1	4.7	3.2	8.5	5.4
Gross domestic income	-1.7	3.4	3.7	2.4	8.6	4.4
Total consumption	2.0	5.9	3.3	4.6	4.9	3.1
Gross domestic investment	1.8	3.3	8.1	-6.2	4.0	7.8

[a] GDP components are estimated at factor cost; the discrepancy is attributable to indirect taxes.

[b] Includes statistical discrepancy.

[c] The Statistics Department has not yet published the public/private breakdown of gross domestic investment. Public investment is therefore estimated from the development budget. The figures may overestimate the share of public investment in total investment.

[d] Goods and nonfactor services.

Source: Statistics Department, MFEP.

GDP in all of Africa in 1987-94, while the average in Uganda was around 15 percent. Investment in *structures* has increased, but the share of *equipment and machinery* has fallen precipitously since 1987/88. In short, Uganda has experienced a period of growth with only modest investment, possibly because the economy started far below the previous peak. The preliminary estimate for 1994/95 shows, however, a substantial increase in investment both in structures and in equipment and machinery.

1.7 **Saving** is important to the growth process as excess investment over domestic saving can create inflationary pressure and aggravate balance-of-payments deficits. While increasing domestic private and public saving is extremely important, raising foreign savings can effectively jump-start investment in Uganda where both public and private assets were badly depleted during the extended period of economic mismanagement. Uganda's gross domestic savings stood at 5.5 percent of GDP in 1985/86. Since then domestic savings have fallen to between -1.2 and 1.1 percent (Figure 1.2 and Table 1.1). Preliminary data show an increase in domestic saving in 1994/95. As domestic saving has been low, Uganda has had to rely on foreign savings to finance domestic investment. In 1985/86 private and official transfers were only 2.2 percent of GDP, while in 1993/94 their share was 13 percent.

1.8 Structural imbalances in the economy must be further reduced to ensure that growth can be sustained (Figure 1.2). It is important to note, however, that the external and internal balances of the mid-1980s do not necessarily reflect good policies. Rather they indicate that almost no external source was willing to finance Uganda's budgets or imports at that time. Today the need to continue reform policies on the one hand, and alleviate widespread poverty on the other, warrant the use of foreign transfers to speed up economic recovery and development. These transfers inevitably produce fiscal and current account gaps, which are means of attaining higher growth and reducing poverty. However, these gaps cannot persist forever. The dependency of the current budget on counterpart funds generated by balance-of-payments support is, therefore, expected to be lessened by increasing domestic revenue. With a very small formal sector, increasing public revenue is a major challenge.

Box 1.1: The Impact of AIDS on Growth

Prospects for accelerating growth are likely to be adversely affected by the AIDS epidemic. A detailed analysis of this problem is beyond the scope of this report, but a few estimates of its impact on the economy are available. First, the World Health Organization projects that the number of HIV-infected people could increase to more than 1.9 million by 1998. It also projects that in 1993-98, 565,000 adults and 250,000 children will die from AIDS. Second, AIDS is not an illness that afflicts the poor only: HIV-prevalence is found to be higher in urban areas and among more educated occupational groups in Uganda. Instead of the urban labor force growing from 400,000 to 1.1 million by 2010, it is estimated to reach only 740,000 because of deaths among workers between the ages of 35 and 50.

Studies on the economic impact of AIDS are less conclusive. Nonetheless, private savings and investment, labor supply, and hence growth are likely to be adversely affected by the epidemic. In the hard-hit areas less land is under cultivation, farmers have shifted to less labor-intensive crops, interest in long-term planning and investments has fallen. Health expenditures are also likely to go up, but as resources for expansion are limited, the time required to care for sick family members may further reduce labor input and hence growth.

1.9 The fiscal deficit increased from 4.2 percent of GDP in 1985/86 to 14.1 percent in 1991/92 and 11.6 percent in 1993/94 (Table 1.2). The Government has refrained from borrowing domestically since 1989/90, financing its expenditures with domestic revenue and external aid. (However, this policy was temporarily reversed in 1991/92.) Fiscal discipline has been the main contributor to price stability achieved during the past few years.

1.10 **Public Revenue.** One of the most critical issues for long-term macroeconomic stability is public revenue mobilization. Despite doubling the share of tax revenue in GDP in the early 1990s, it remains at around 10 percent, and is well below the Sub-Saharan average of 18 percent. Public expenditure in Uganda was 18 percent of GDP in 1993/94, which is also below the Sub-Saharan average of 28 percent. Counterpart funds generated by quick-disbursing aid were worth U Sh 244 billion in the 1993/94 budget and covered more than 40 percent of total nonproject outflows—current expenditure, debt service, and settlement of arrears—while 90 percent of the development budget was externally funded. It is estimated that in 1994/95 counterpart funds were more than 30 percent of the total nondevelopmental outflow, while 84 percent of public investment was donor-funded. At the same time, the Government accumulated deposits vis-à-vis the domestic banking sector worth U Sh 27 billion in 1993/94. In 1994/95 the estimated fiscal savings are U Sh 99 billion.

1.11 In the long term it is important to reduce the dependence of Uganda's public sector budgets on external finance as such financing may not be permanently available and is inherently uncertain as donor resources and preferences change over time. Also, different donor requirements may limit the flexibility of public expenditure and cause additional costs or delays. Many inside and outside Uganda argue that aid creates a dependency that adversely affects both private behavior and public choice and may result in less than optimal economic performance and growth. All of these arguments call for increased contributions from domestic taxation to finance public spending.

1.12 At the same time Uganda can expect to benefit from continued aid inflows in the future because of its good economic performance, low level of per capita income, poor social indicators, low stock of productive assets, and high external debt service. Higher domestic revenue and maintenance of the current level of aid in real terms imply that the Government's share of GDP will go up unless external assistance increasingly finances private sector budgets in Uganda in the first round of their use. However, it may be difficult for multilateral and bilateral donors to directly finance the private sector as their operations have traditionally been geared to dealing with governments.

1.13 The revenue effort in Uganda is low for several reasons. First, the transition from reliance on subsistence and informal economic activity, to which the economy retreated during the long period of civil strife, has been relatively slow. Second, income levels are low and direct taxation of the large agricultural sector is limited. At the same time the

Table 1.2: KEY ECONOMIC INDICATORS (Public Finance)

Indicator	In Fiscal Years					
	1986	1990	1991	1992	1993	1994
	(as % of GDP at current market prices)					
Current revenues	6.4	6.8	7.4	6.7	7.1	8.2
Current expenditures	7.9	7.1	7.1	11.6	8.2	8.8
Capital expenditures	2.7	5.5	7.3	9.0	10.0	9.5
Overall Deficit	-4.2	-6.5	-7.8	-14.1	-12.1	-11.6
Budgetary Grants	1.1	1.5	3.8	7.0	7.9	6.5
Foreign borrowing, net	1.0	6.6	3.5	5.1	5.1	5.8
Domestic borrowing	2.1	-1.6	0.5	2.0	-0.6	-0.6

Source: MFEP.

industrial and service sectors are small and hence formal employment is low. Third, revenue leakages are substantial because of exemptions, corruption, smuggling, and a virtual collapse of information and accounting systems. Fourth, Uganda has a poor tax paying culture, which will take time to change. As a result, taxes on international trade still contribute well over 50 percent of total revenue. The establishment of the Uganda Revenue Authority (URA) in 1991 introduced better incentives and facilities and thus improved tax administration and collection rates. But Uganda still has a long way to go to achieve the Sub-Saharan average in its revenue effort.

1.14 **Tax Reform.** Since 1987, the Government has introduced various measures to reform the tax system. The reforms have had several objectives. First, there is an attempt to widen the tax base by both increasing the number of taxpayers and by reducing widespread exemptions. By March 1995, the URA had issued around 350,000 taxpayer identification numbers to individuals and more than 50,000 to businesses. Second, the reform aims to achieve better compliance through lower rates. In particular, the corporate tax rate has been reduced from 50 to 30 percent. Third, the reform aims at reducing reliance on taxation of foreign trade and moving toward value added and direct taxes. In Ghana, for example, a VAT was recently introduced which rapidly increased inflation as many more firms than those eligible began to charge the VAT. Subsequently, the VAT was temporarily withdrawn. This highlights the importance of adequate preparatory work prior to implementation of the VAT. Relatively little has been achieved in the area of direct taxes in Uganda. The income tax share of total taxes has increased from 10 percent in 1988/89 to 14 percent in 1994/95. Still, 14 percent is a much smaller share than that in neighboring countries (although data problems in Tanzania and Ethiopia may bias the comparison). However, the implementation of the VAT in Uganda, which is expected to become effective in July 1996, as well as universal income taxation, requires further improvements in tax administration and education of the business community and the general public to achieve taxpayer compliance.

1.15 Fourth, the reform attempts to reduce tax exemptions. Exemptions from duties and sales and excise taxes are granted on the basis of three different categories: the Second Schedule of the Tariff Code (including diplomatic), the Investment Code, and statutory instruments. The latter is the most important source of revenue loss. Reductions in the number of tax exemptions have not followed a consistent path, however. The duty payable on all industrial raw materials, for example, was suspended in 1987, only to be reintroduced in 1990 at the rate of 10 percent. In 1992 the import duty on raw materials was again abolished, only to be reimposed in the following year. In 1994 remission of the 10 percent duty was allowed for most raw materials not available locally. As a result almost no import duties (or sales taxes) are collected on imported inputs unless a domestic industry also produces the good. In addition, exemptions are granted on an ad hoc basis. The Investment Code (1991) allows exemptions from import duties and sales taxes for imported machinery, equipment, and construction materials for practically all investments. All qualifying investors are exempt from the corporate tax, withholding tax, and dividend tax for three to six years.

1.16 Data on revenue by beneficiaries as a result of exemptions from import duties and sales taxes on non-oil imports are available for the first quarter of 1992/93.[2] At an annualized rate the revenue loss is estimated to be 120 percent of the total revenue raised from import duties and sales taxes on non-oil imports. The largest revenue loss, 41 percent of the total revenue foregone, comes from exemptions granted to foreign NGOs. This loss was followed by exemptions to donor-funded government projects (33 percent) and industry (22 percent). Of the total public revenue raised during the same year the estimated loss because of exemptions was 36 percent. In the case of donor-funded projects, the revenue loss is of course not real. This is because Government is usually the recipient of aid, but the figure for foreign NGOs seems too high relative to other beneficiaries, which could be an indication of misuse of these exemptions.

1.17 In its 1995/96 budget the Government announced a plan to reduce duty and tax exemptions across the board. It introduced a new 5 percent duty rate for raw materials. In addition, a number of changes to the Investment Code were announced which will reduce exemptions, and make the remaining ones more equitable. These are important steps forward in an effort to increase public revenue and improve the incentive regime.

1.18 Following the introduction of various tax measures over a number of years, an assessment of the tax system is necessary in order to chart out future reforms. Several issues require particular attention. As stated in the 1995/96 budget speech, the system of large-scale duty, sales tax, and excise exemption must be dismantled and replaced by low, uniform rates. Measures to broaden the tax base should be continued, including improving local revenue effort. In addition, the planning horizon of tax policy must be extended, at least to the medium term, and the reliance on foreign trade taxes ultimately

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[2] For more recent information, which is qualitatively similar to the data presented here, see Short, J. (1995), *Assistance with Project Design, Private Sector Development Review of the Tax and Incentive Structure*, ODA.

shifted toward a VAT and direct taxation. Removing most exemptions will improve the fiscal position, reduce abuse and the antiexport bias, and improve resource allocation. It is paramount that the revision of the Investment Code be completed as soon as possible. Cross-country evidence suggests that low rates without exemptions can do more to promote investment than the current scheme. Tax reform would benefit from a clear set of principles and objectives, preventing various interest groups from affecting tax policy in a stop-go manner. Expansion of the tax base is vital as raising tax rates would probably discourage private investment, which is primarily self-financed. The domestic revenue effort can, therefore, increase only gradually. Targeted annual improvement in public revenue requires a concerted effort from those responsible for setting and implementing tax policy.

1.19 **Fiscal Decentralization.** The central government's share in total government expenditure in Uganda is relatively high by international standards: 76 percent in 1992/93. The share of revenues collected by the center is even higher, only 5 percent of public expenditures were covered by local revenue. In 1990/91 only about one quarter of local revenue was spent directly on services. The rest went to administrative costs. Although revenue collection in a number of districts has been improving in the past few years, large annual fluctuations occur, indicating either that the capacity for resource mobilization varies or that the existing capacity is not exploited effectively. Any major improvement in local revenue effort requires that taxpayers perceive that service delivery has improved dramatically. Substantial improvement in the delivery of primary education could, for example, cause people to respect local government and lead to an improved local revenue effort. Donors can have a useful role in supporting improved service delivery which in turn will improve the local tax effort.

1.20 If service delivery is decentralized, revenue-raising responsibilities must be decentralized as well. Direct taxes, such as personal income and corporate taxes and taxes on wealth, are better administered by the central government. Property, general sales, and excise taxes and some natural resource taxes are suitable candidates for decentralization. Local authorities could also collect a centrally designed VAT. Finally, user charges for public services are a suitable local source of finance. Borrowing to cover local government operating deficits should not be permitted, but there should eventually be a mechanism to assist local government borrowing for capital projects. The broad guidelines for future assessment and collection of revenue at the local level are expected to continue to be determined by the center, mainly through the Local Government Finance Commission, which is not yet operational.

1.21 More generally, the inter-governmental fiscal arrangements that must be worked out in order to decentralize decision making and public service delivery can be classified according to: the extent to which services will be provided locally; the division of revenue-raising powers between central and local governments, including tax sharing and harmonization; the system of transfers and loan finance to bridge the gap between locally raised revenue and expenditures; the administrative, budgeting and monitoring framework; and local capacity building. So far the expenditure side and, to some extent,

capacity building have received the most attention (Box 1.2). The possibility of transferring the center's taxing decisions to districts has not yet been addressed.[3]

Box 1.2: Fiscal Decentralization

The gradual process of fiscal decentralization in Uganda began in 1993/94 when thirteen districts obtained a vote on the central government budget. They were, however, under the control of the line ministries during the first year. In 1994/95 an additional fourteen districts were permitted to have a vote, and the initial thirteen pilot districts obtained a block grant. In 1995/96 the remaining twelve districts will receive a vote, and the fourteen districts will receive a block grant. By 1996/97 all districts will be in the block grant system. Block grants are based on past expenditure levels. But this method may not be the best way to allocate funds in the long run. Hence, an equitable and transparent grant system based on the districts' needs must be designed.

The most important services being transferred to the districts are primary education, primary health care, feeder roads, and agricultural extension. Some local governments have been delegated responsibility for services, such as hospitals and secondary schools for which the central government provides additional funding. In practice only the recurrent budget has been decentralized. The development budget, which is funded mostly by external sources, is expected to remain with the central government until 1997/98.

1.22 The ongoing decentralization process has at least two direct links to fiscal policy and macroeconomic stability. First, fiscal control may be harder to maintain in the transition period, while responsibilities within the new decentralized administrative system are being worked out in practice. Second, decentralizing of service delivery can improve local tax effort by increasing accountability and improving service delivery. At present local capacity is extremely limited, however, but in the long-term decentralization holds promise for rural development. As the vast majority of the poor in Uganda live in rural areas, decentralization has a direct link to poverty reduction.

1.23 **Monetary Policy.** The key monetary aggregates have grown rapidly in recent years: broad money (M2) at an average annual rate of more than 40 percent since 1991/92, while base money growth has varied from 80 percent to below 10 percent. Base money is currency in circulation and commercial banks' reserves at the Bank of Uganda, while broad money is currency and demand, savings and time deposits. The prime source of monetary growth has changed from increases in domestic credit to increases in net foreign assets. The ratio of broad money supply to GDP has almost doubled, rising from 5 percent in 1991 to about 9 percent today. This level is still very low by international standards.

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[3] A number of local taxes are collected throughout Uganda. The graduated personal tax, for example, has wider coverage than most centrally collected taxes; hence it has potential for widening the tax base. Currently, the graduated personal tax rates are low. The infrastructure of the local tax administration must be built up working through the district Resistance Council (RC5) level and down the ladder to local authority. The base of the graduated personal tax could be strengthened toward a permanent income or wealth tax that covers fertile land and property as well. In urban areas assessment rates—property taxes—are another potential source of revenue enhancement since the land component of property is not being taxed at all.

Box 1.3: Improving Public Sector Management

Like a number of other countries in Sub-Saharan Africa, Uganda is presently redefining the role of Government, by dismantling controls and reforming institutions, such as the civil service, the financial sector, public enterprises and so on. Civil service reform has been relatively successful: the number of civil servants on the central government payroll has fallen from 320,000 to close to 150,000. Also, ministries and other government agencies have been restructured. A number of challenges still remain: monetizing in-kind benefits and ending the government provision of housing and transport to civil servants; phasing out salary "top-ups" relating to donor projects and ensuring that a "living wage" is achieved, which may require further downsizing; reviewing the structures and functions of ministries and agencies as the role of Government continues to be redefined; and decentralizing the administration. Rationalization of the public investment program, which has reduced the number of development projects from over 800 to around 160, is expected to be completed by the end of 1995/96. The adoption of a three-year budget framework should further improve planning of public expenditure.

While marketing monopolies have been removed, the Government of Uganda continues to have a large parastatal sector which contributes 7-8 percent of GDP and formal employment but drains public resources much more than its share in production would warrant. Direct subsidies and foregone revenue from indirect subsidies to state enterprises, such as tax exemptions and preferential access to credit and guarantees, are estimated at US$180 million a year—about three times the government contribution to the development budget. Clearly this has to change. Unfortunately, the public enterprise reform and divestiture program have suffered from design problems and slow progress. The Government has overhauled its strategy recently to stress: effective financial control of all parastatals; faster speed of privatization; predictability of the divestiture exercise; and consensus-building among Ugandans on privatization. The reform is yet to produce the expected results but recent efforts are promising in view of achieving a much leaner parastatal sector and more efficient provision of services.

1.24 Since 1992/93 credit and fiscal management have improved substantially. Controls over domestic bank lending, apart from prudential controls, have been removed. Financial institutions are no longer obliged to lend to the Government; government borrowing takes the form of treasury bill auctions in which banks and nonbanks may take part. At present, treasury bills are being sold for purely liquidity management purposes. The Bank of Uganda has stopped direct loans to public enterprises, as well as excessive overdraft facilities for commercial banks. In addition, interest rates have been fully liberalized. Inflation control has been one of the main achievements (see Figure 1.1), as annual average inflation declined from 42 percent in 1991/92, to about 5 percent in early 1995. At the end of May 1995 inflation was 3 percent on an end-period basis.

1.25 Base money is the central bank's monetary liability. The main adjustments to base money have arisen from changes in net lending to the Government. Base money management is made more effective in Uganda because government expenditure is strictly limited by the availability of foreign aid and tax revenue, without domestic borrowing. Expenditure releases are also adjusted to assist monetary management bearing in mind monthly variations in price and exchange rate data and other macroeconomic indicators. Similarly, because of instability of the money multiplier, the central bank uses

Table 1.3: KEY ECONOMIC INDICATORS (Monetary Indicators)

Indicator	In Fiscal Years					
	1986	1990	1991	1992	1993	1994
Growth of M2 (%)	10	57	47	54	42	33
Growth of base money (%)	...	...	...	80	20	43
M2/GDP (%)	10	7	8	8	8	9
Price Indices (1991 = 100)						
Merchandise exports	4	55	81	123	144	124
Merchandise imports	2	47	78	131	155	147
Merchandise terms of trade	242	117	104	94	93	84
Real interest rates [a/]	..	9.5	3.8	-19	24.7	-4.4
Average annual inflation (CPI;%)	..	45.4	24.6	42.1	28.4	7.8
GDP deflator	122.9	45.4	47.2	45.9	30.7	6.9

[a/] 91-day treasury bill, end-year basis.

Sources: BOU, Statistics Department, MFEP.

a broad range of economic indicators to guide its monetary policy. The central bank is less willing to use its ability to change commercial banks' statutory reserves as it can have adverse effects on banks' profitability. The current cash reserve ratio is an average of 7.5 percent for demand and time deposits.

1.26 Summarizing, the traditional sources of monetary instability in Uganda, i.e. monetization of fiscal deficit, and excessive overdraft facilities at the central bank for commercial banks have been removed. Uganda is currently well served by a tight fiscal policy which, with ongoing monetary deepening, keeps inflation within single digits. Until instruments of indirect monetary control become more effective, the policy of public expenditure restraint which produces increasing fiscal savings at times when external resources are abundant acts as a powerful force for stabilization and will remain the main instrument for control over the growth of both base and broad money. Also, the Government has no need for treasury bill sales to finance its deficit. Interest on treasury bills sold with a view to deepening financial markets is an additional fiscal burden.

1.27 **The Banking Sector.** The prime task in financial market development is to create a solvent, efficient and competitive banking system, which will, over the long run, require interbank and secondary bill markets for liquidity management and portfolio choice. Uganda's good economic performance in recent years and future development prospects could be undermined by critical deficiencies in the financial system. Overall, the commercial banking system is in a precarious state. More than half of the fifteen commercial banks made losses in 1994 and have a large negative core capital of over U Sh 100 billion. A number of banks are insolvent, including Uganda Commercial Bank. Aggregate nonperforming assets are in excess of 50 percent of total loans (27 percent

excluding Uganda Commercial Bank) making much of banking activity nonviable. Banks must adopt more prudent financial discipline. Intermediation costs are high (in excess of 12 percent of interest bearing assets) because of administrative inefficiency and the high share of nonperforming loans. These costs impose a significant burden on borrowers. Finally, the financial position of the Bank of Uganda is untenable because of foreign exchange losses, and losses on past loans to the Government and public enterprises.

1.28 The complexity of these issues, given the institutional capacity of the banking system, calls for a focused approach. Immediate actions are required on four fronts: privatizing UCB, finding a more aggressive approach to deal with distressed private banks, strengthening of the central bank including further restructuring and recapitalization so that it can manage the weaknesses in the banking system, and improving financial discipline. UCB will be put up for sale in "as is" condition through a merchant bank. At the same time, to meet the Government's objective of maintaining a minimal level of financial services in the rural areas that are served only by UCB, a rural finance study will be initiated to determine how the Government should intervene if the new owners do not want to maintain UCB's rural network. Among other actions, the Government must establish and aggressively enforce strict short-term targets for problem banks in key areas, such as capital adequacy, insider lending, and replacement of bank management and, where necessary, close institutions that fail to meet targets. Finally, an efficient deposit protection fund should be established to deal with potential bank closures. At the same time urgent institutional measures must be taken to address the problem of financial discipline, including establishing a credit information bureau and streamlining the judicial system to expedite legal recourse for debt collection.

Exchange Rate Management and Terms of Trade Shocks

1.29 Since 1987 Uganda has gradually moved from a system in which the central bank allocated foreign currency to a flexible foreign exchange system. The changes in exchange rate management include devaluations (1987–89), expansion of retention schemes for exporters (1988–89), and a real exchange rate peg (1990). An *open general licensing scheme* and a *special import program* were used during 1988–90 to allocate donor funds for imports. Nevertheless, the parallel market premium remained at around 100 percent. In 1990 the black market for foreign exchange was legalized by authorizing foreign exchange bureaus to trade in currencies without approval from the central bank. In 1992 a *Dutch auction* system was introduced for donor funds (the rate is determined by the lowest bid that exhausts the supply of currency in the auction). In November 1993 an interbank market replaced the auction, and all restrictions on international transactions were eliminated.

1.30 Until the end of 1991 the *real effective exchange rate* (REER) was depreciating strongly (by about 40 percent in 1990–91). It remained more or less stable until mid-1993 and then appreciated by more than 30 percent by June 1994. Since then, and despite the coffee boom, the REER has depreciated slightly. Initially, after the introduction of the interbank market, the central bank intervened modestly by market smoothing, but since

September 1994 the Bank of Uganda has been actively accumulating foreign exchange reserves in response to the coffee boom.

1.31 **External Trade and the Balance of Payments.** Despite substantial liberalization, the ratio of exports to GDP (at current market prices) declined from 11 percent in 1985/86 to 6 percent in 1993/94, while the share of imports to GDP increased from 14 percent to 18 percent. The *decline* in the share of exports in GDP can be attributed to the low world price for coffee prior to June 1994, while the persistently low *level* of exports in GDP is likely to reflect the remaining antiexport bias (analyzed in chapter 2). The value of total merchandise exports was US$254 million in 1993/94 and is expected to rise to US$537 million by 1994/95 (to around 11 percent of GDP), reflecting the rise in the international price for coffee in June 1994 (Table 1.4). The value of imports of goods and nonfactor services stood at US$893 million in 1993/94 but is expected to increase by over 30 percent, to US$1,193 million in 1994/95. The gap between exports

Table 1.4: KEY ECONOMIC INDICATORS (Balance of Payments)

	In Fiscal Years						
Indicator	1986	1990	1991	1992	1993	1994	1995*
				(US$m)			
Exports (GNFS) [a]	389	246	199	195	206	333	609
Merchandise (fob)	379	210	176	172	157	254	537
o/w coffee	360	159	127	117	99	172	402
Imports (GNFS)[a]	446	676	671	582	753	893	1193
Merchandise (fob)	380	584	545	451	573	718	981
Current private transfers	101	78	81	136	241	304	397
Current account balance							
(excluding grants)	0	-429	-449	-338	-355	-317	-231
(including grants)	31	-276	-187	-132	-96	-67	-8
Overall balance	2.4	-44	-101	-121	-8	110	138
Gross reserves	86	35	50	73	112	219	386
in months of imports (GNFS)	2.3	0.6	0.9	1.5	1.8	2.9	4.0
Current account balance (incl. grants)							
(As % of GDP at current market prices)	0.08	-6.4%	-5.6%	-4.5%	-2.9%	-1.7%	-5.7%
Real exchange rate (1990=100)							
IFS (US$/LCU)[b]	...	100	76.7	69.9	72.7	...	...

* Provisional figures, MFEP.

[a] GNFS denotes *goods and nonfactor services*.

[b] LCU denotes *local currency units*. An increase in US$/LCU denotes appreciation.

Source: BOU and IMF.

and imports has led to a sizeable resource balance deficit. This deficit was partly offset by US$304 million of net private transfers in 1993/94. In 1994/95 private transfers are estimated at US$397 million.

1.32 In the last three years private transfers have become the most important financing source. Current private transfers capture foreign exchange bureau transactions, which cannot be identified in detail. They are assumed to include the proceeds from unrecorded nontraditional exports, direct foreign investment, transfers from Ugandans living abroad and expatriates living in Uganda, and aid provided by nongovernmental organizations (NGOs). For effective policy making the Government needs to identify the components of private transfers. For example, the nontraditional export response could turn out to have been stronger than indicated by official export data.

1.33 For the first time since 1986/87 the overall balance of payments showed a surplus of US$110 million in 1993/94. Gross reserves held by the central bank increased from US$219 million in June 1994 (about 2.9 months of imports) to US$386 million in June 1995 (about 4 months of imports).

1.34 **Managing the Coffee Boom.** The Ugandan economy is vulnerable to commodity booms and busts as its external balance continues to depend heavily on coffee. Proper management of external shocks both positive and negative is vital for macroeconomic stability. Currently, the Ugandan economy is experiencing a positive shock from temporarily high world prices for coffee. Management of this boom is a timely topic, but its importance extends beyond the present situation as booms are likely to occur in the future. Apart from *stability,* booms and the way they are managed have a direct impact on *investment.* As coffee is a relatively more important source of income for the poor than for the better-off in the main coffee growing areas, boom management is also linked to *poverty reduction.*

1.35 In order to quantify the magnitude of the boom, a *counterfactual* must be defined. The international price of coffee for the first half of 1994 and the 1993/94 volume are used. The windfall is estimated using the World Bank (January 1995) price forecasts and assuming an increase of 10 percent in coffee deliveries. The present value of the *direct* increase in income (the increase attributable to the rise in coffee prices) is estimated to be US$787 million, or 17 percent of GDP at factor cost in 1993/94. Assuming a reasonable GDP multiplier (somewhat below the Sub-Saharan average), the estimated *indirect* effect on income (resulting from higher output) would be US$315 million, or 7 percent of GDP. The total size of the boom (its net present value) is therefore 24 percent of GDP. Windfall income would thus be 6.6 percent of GDP in 1994/95, 5.7 percent in 1995/96, and 3.8 percent in 1996/97. The boom is expected to end by 1997/98 (windfall income in 1997/98 is estimated to be 0.9 percent of GDP). These figures show that the present boom is not a particularly large external shock in terms of GDP. But it is more sizable if compared with the monetized economy, which is only 70 percent of GDP.

1.36 Assuming that both the Government and the private sector will increase their consumption only by an amount that is sustainable—that is, by an amount that can be maintained in the future—and assuming (for illustrative purposes) that the rate of return on investment is 10 percent, the Ugandan economy should save up to 70 percent of the windfall. At the onset of the boom these savings are likely to show up as an increase in the demand for *financial assets*, in practice money and bank deposits. Subsequently, the savings are likely to be invested so that there is an increase in the demand for *real assets*. *Ex ante*, it was difficult to foresee whether the Ugandan private sector would prefer to hold shillings or foreign currency in the absence of any other financial assets. But the experience since June 1994 indicates that the private sector has indeed confidence in the shilling. The underlying inflation rate dropped sharply from 10.4 percent in May 1994 to 2.9 percent in September 1994, indicating that people increased their holdings of shillings (as initially there was no major accommodating increase in the money supply). Increased demand for money implies a temporary increase in seigniorage that accrues to the Government (or the central bank). At the same time merchandise imports have increased much more than initially expected.

1.37 Maintaining low inflation and a stable exchange rate are crucial for managing the macroeconomy during a boom. Two distinct forces pressure the exchange rate to appreciate. First, the shilling will appreciate if the private sector increases its real holdings of shillings. The central bank can help prevent this type of appreciation by accumulating reserves and increasing the nominal money supply. Second, the *Dutch disease* effect may rise, in which the inflow of foreign exchange causes the local currency to appreciate. The effect can be delayed by accumulating reserves, but when the real transfer to the economy occurs, the exchange rate will inevitably be affected because of the increased demand for—and therefore price of—nontradable goods. To avoid inflation, the price of tradable goods must go down, that is, the exchange rate must appreciate. It is difficult, however, to quantify the effect of the coffee windfall on the exchange rate in Uganda, partly because it is not clear which goods are internationally tradable.

1.38 Given the private sector's response to the boom and the objective of avoiding unnecessary currency appreciation, the central bank must accommodate the private sector's increased demand for money by accumulating reserves. The daily exchange rate and the monthly price level are the best available sources of information for implementing this policy. So far this policy has worked well—nominal appreciation between end-June 1994 and March 1995 was only 4 percent, while annual average inflation was less than 5 percent. Likewise, the central bank should decumulate reserves when inflation shows signs of picking up, an indication that people are shifting from financial assets (money) into real assets, including imports. In addition to holding reserves on behalf of the private sector, the central bank will temporarily hold the tax receipts from coffee exports on behalf of the Government. Apart from accumulating reserves as a macroeconomic policy instrument, the Government has a longer term objective of raising the overall level of reserves to create a more permanent buffer to enhance the economy's overall capacity to sustain external shocks. For future boom management financial sector reform is essential so that the private sector has access to

forms of savings other than just money. Similarly, having an efficient banking sector will be crucial for intermediating savings into investment.

1.39 The Government reinstated a tax on coffee exports—at a constant rate of 32 percent above U Sh 1,100 per kg—as a stabilization measure in its 1994/95 budget.[4] The tax was modified in the 1995/96 budget: a constant rate of 25 percent above U Sh 1,500 per kg. Determining the level of the tax was an unnecessarily long process, which created policy uncertainty in the market. The actual collection of the coffee tax started only in the beginning of 1995 and has not yet been fully effective. The main arguments in favor of the tax on coffee exports were the need to sterilize part of the inflow to prevent inflation and appreciation of the shilling. In the absence of financial instruments that could mop up excess liquidity from the market, a tax on coffee exports was seen as the only option. *Ex ante*, the risks of rapid inflation and appreciation of the shilling were high, which could have left all exporters, including the coffee sector, worse off. It was also feared that those who receive the windfall income from the boom would, in the absence of savings instruments, rapidly increase their consumption spending and demand for nontradable goods, so that the real exchange rate appreciates.

1.40 Empirical evidence from other Sub-Saharan African countries shows, however, that a *transient* rise in income may not necessarily result in a sudden increase in private spending.[5] The private sector may prefer to increase its spending on a *permanent* basis and hence saves and invests a large part of the windfall income. It remains to be seen whether this is the case in Uganda. It is also widely acknowledged that an export tax is not an ideal stabilization measure for a number of reasons: first, all exports are already taxed *implicitly* by import taxes, which are high in Uganda. (This point is further elaborated in chapter 2.) Second, a relatively high tax rate provides an incentive to smuggle to neighboring countries that do not have a similar tax, or to evade the tax by other means. In a competitive environment, as in the Ugandan coffee sector today, those who evade taxes can pay higher prices to coffee growers and hence outcompete those who pay taxes. There seems to be some evidence of that as farmgate prices have fallen little since the introduction of the tax. Finally, the tax may discourage coffee producers from investing in coffee. But investment is needed in Uganda as most coffee trees are old and yields are low. Therefore, for future trade shocks, it would be useful to analyze how the private sector in Uganda actually responded to the present boom. This would allow an assessment of the costs and benefits of an export tax as a stabilization measure in the future.

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[4] Under this policy, the Government may receive as much as between 40 and 60 percent of the windfall from the coffee tax, from duties and excise and sales taxes on increased imports, from higher income taxation, and from seigniorage when people increase their money holdings.

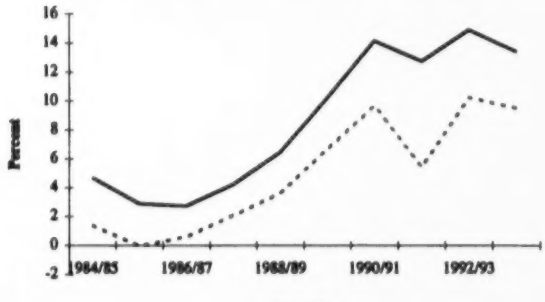
[5] For empirical evidence of the private response to a coffee boom in Tanzania and Kenya, see Bevan and others (1990). See also Little, and others (1993).

1.41 Official gross aid flows to Uganda totaled about US$550 million in 1993/94, more than twice the value of merchandise exports. As a share of GDP gross aid flows have undergone a fairly steep rise, from 2.7 percent in 1986/87 to 13.4 percent in 1993/94. The primary purpose of aid is to finance investment in physical and human capital, infrastructure, and institutions. At present aid covers more than 80 percent of all public investment and a substantial share of other public outlays, such as recurrent expenditures and debt service. While having a strong positive effect on investment, growth, and poverty reduction, large-scale external transfers impose an additional burden on macroeconomic management and may impact the economy's incentive structure. In 1993/94, for example, aid provided about 45 percent (35 percent in 1994/95) of all foreign exchange available to Uganda. Because only about 30 percent of imports are directly related to aid-financed projects, aid is likely to have an impact on the real exchange rate. However, it is not possible to quantify this influence because adequate data are not available.

1.42 As aid is an inflow of foreign exchange primarily to the public sector, the real exchange rate could appreciate by fostering an increase in public expenditures which increases the demand for and the price of nontradable goods. The resulting appreciation of the real exchange rate could diminish the attractiveness of producing tradable goods. As public revenue gradually increases, the government's objective is to phase out counterpart funds generated by import support from financing recurrent expenditures.

1.43 About 63 percent of all project aid disbursements and 52 percent of import support was supplied by multilateral donors. The largest contributor among the multilaterals is the International Development Association (IDA) followed by the European Union (EU). Denmark is the largest single bilateral donor on the project side providing 7 percent of project support. The United Kingdom supplied the most import support—23 percent. Grants account for little less than half of total aid, and the rest is concessional loans. The share of grants has increased from 23 percent in 1986/87 to 46 percent in 1993/94. The share of total import support (loans and grants) has risen from 28 percent in 1987/88 to 36 percent in 1993/94. These numbers do not include aid flows from NGOs, which are included in the balance of payments under current private transfers. Aid from NGOs has soared since 1990/91.

Figure 1.3: GROSS AND NET AID AS SHARES OF GDP

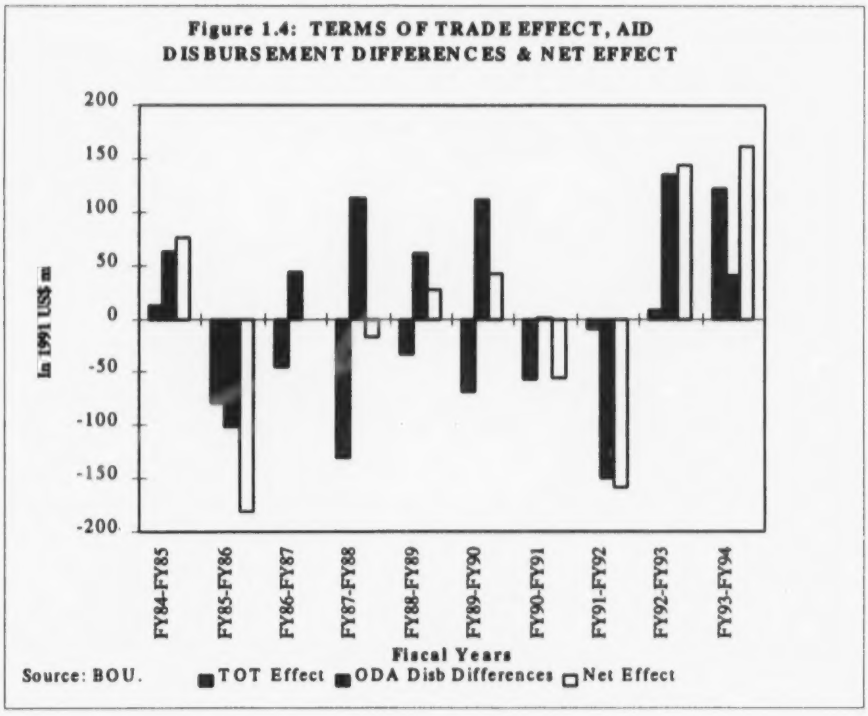


Source: BOU.

Note: The data in the above graph are taken from the BOP statistics, which are not necessarily consistent with fiscal data.

The exact figure is not available, but some estimates put it at around US$125 million a year.[6]

1.44 The concept of net inflow of aid is more relevant from a liquidity point of view. Both net and gross inflows have had a fairly strong upward trend (Figure 1.3).[7] Despite increasing aid flows, for most of the adjustment period, the negative impact of falling external terms of trade dominated the positive impact of increasing aid flows (Figure 1.4).[8]



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6 Some of the larger NGOs in Uganda are Oxfam, Save the Children Fund, Care, Amrif, Acord, ActionAid and the Red Cross.

7 Changes in a country's debt position apart from ordinary amortization, such as changes in arrears and exceptional financing (consisting mainly of rescheduling or cancellation of debt), are also considered to be aid.

8 In order to capture the impact of the terms of trade (TOT) change for a given time period, the "TOT effect" is calculated. It is defined to be the change in the purchasing power equivalent of exports in terms of imports in 1991 US dollars. The change between period *i* and *j* is $Xj*TOTj - Xi*TOTi$, where X is exports in 1991 US dollars deflated by the MUV. This value indicates how much compensation (in terms of imports) is needed to offset the TOT effect. The difference in net disbursements of Official Development Assistance (ODA) from all sources in 1991 US dollars is obtained to assess the change in external assistance. The change in assistance is compared with the change in import equivalents to obtain the net effect. Negative net effects may indicate that adverse TOT effects were not fully offset by increases in external aid. In that sense the country would be "underfinanced," while positive net effects may imply "overfinancing".

SUSTAINABILITY OF EXTERNAL DEBT

1.45 As of December 1994, Uganda had US$3.2 billion in total external debt outstanding and disbursed (equal to about 80 percent of its GDP in 1993/94), which included around US$250 million in principal and interest arrears. These arrears were mainly to non-Paris Club bilateral creditors. Over 70 percent of total debt outstanding and disbursed was owed to multilateral institutions (including US$1.55 billion to IDA and US$342 million to the IMF). About 24 percent of the total external debt was owed to official bilateral creditors, half of which was owed to Paris Club creditors. Scheduled debt service obligations (including IMF charges) in 1993/94 were equivalent to 52 percent of goods and services exports. Multilaterals accounted for more than half of the debt service payments that year (IDA debt service was 7.6 percent).

1.46 In 1992 the Government of Uganda adopted a well-articulated strategy for managing its debt. The strategy has five components: year-by-year rescheduling of eligible Paris Club bilateral debt from pre-June 1981 and maximum annual deferral of all Paris Club bilateral debt accumulated thereafter, write off or long-term rescheduling of all non-OECD bilateral debt, extension of bilateral balance-of-payments support to cover multilateral debt service payments, buyback of uninsured commercial debt, and virtual cessation of government or government-guaranteed external borrowing on all but highly concessional terms. Uganda has progressed in implementing this strategy: it has secured rescheduling from the Paris Club, most recently through application of a stock of debt operation on *Naples Terms* (although this translates only to a 3 percent reduction in the present value of total debt); some non-OECD bilateral debt has been rescheduled, although much remains untreated; IBRD debt has been fully paid, but African Development Bank (ADB) debt, though relatively small, is still uncleared; a buyback of unsecured commercial debt, financed by the Debt Reduction Facility for IDA-only countries and bilateral donors, was successfully completed; and Uganda has avoided almost all new nonconcessional borrowing.

1.47 **Debt Sustainability.** Projections indicate that scheduled debt service obligations in 1994/95–1995/96 would be halved and scheduled obligations in the next decade substantially lowered if several conditions hold: no further relief is forthcoming from the Paris Club, non-OECD bilateral creditors would grant Uganda relief comparable to that obtained from the Paris Club, ADB debt is covered by bilateral donors, Uganda continues to borrow only on highly concessional terms (except for very small amounts of nonconcessional borrowing), new official financing continues at its current level in real terms, and exports grow in real terms at around 7 percent per annum on average during 1994/95-2002/03 and 5.5 percent thereafter. Nevertheless, from 2004/05 onward, payments on the rescheduled official bilateral debt (Paris Club and non-Paris Club) become due, adding to Uganda's debt service obligations. Thus, despite progress with the debt strategy so far, Uganda's external debt situation remains tenuous.

Table 1.5: LIQUIDITY RATIOS

	Actual Debt Service Obligations	Projected Debt Service Obligations						
	1992/93	1993/94	1994/95	1996/97	1999/00	2004/05	2009/10	2013/14
Debt Service/Exports of G&S								
Before debt relief	83.4	52.0	23.6	28.2	28.9	17.5	13.0	12.6
After debt relief	83.4	52.0	11.9	18.7	17.2	18.2	14.0	13.7

Note: Private transfers are excluded from exports; however, in Uganda's case, they are likely to include misreported export receipts.

Source: World Bank staff estimates.

1.48 Uganda's liquidity situation, as given by the liquidity ratio (debt service as a percentage of exports), shows that once all of the above debt relief measures are accounted for, the ratio will rise from 12 percent in 1994/95 to 17 percent in 1999/2000, and then attains levels of more than 15 percent until 2005/06, indicating high indebtedness (Table 1.5). After 2005/06, the debt-service ratio is expected to fall below 15 percent. The share of IDA in debt service, while rising until 2010, should remain below 10 percent of projected exports throughout the period.

1.49 Uganda faces a serious debt overhang—implied by the *solvency ratio,* the present value of debt service obligations relative to the annual average of 1992/93–1994/95 export earnings. The solvency ratio, based on the December 1994 stock of debt and without new commitments, would decline from 451 percent before debt relief to 318 percent, assuming that the terms of the February 1995 Paris Club agreement on Uganda are extended to all bilateral debt, along with prepayment of some multilateral debt. A country with a solvency ratio higher than 300 is considered severely indebted. Although this ratio may be somewhat overstated because of underreported exports, its size underlines the importance of further debt relief, rapid export growth and favorable terms for future borrowing. If the debt strategy is fully implemented and export growth is relatively high, the solvency ratio should fall below 150 by 2002.

MACROECONOMIC PROJECTIONS

1.50 The macroeconomic projections for Uganda[9] were prepared on the assumption that the Government will continue implementing fiscal and monetary policies in such a way that inflationary pressures are kept in check. It is also assumed that progress will be made on the structural reforms identified in the rest of this report, which would provide the basis for supply responses. Continuing satisfactory performance in stabilization and

[9] The World Bank's macroeconomic Revised Minimum Standard Model Extended (RMSM-X) was used and adapted to the Ugandan economy. Detailed results are presented in Tables C1-C5 in the Annex.

structural reforms will also provide the basis for continuing support from the international donor community.

1.51 The model assumes that, given the substantial improvement in the terms of trade of Uganda, *GDP* will grow by about 7.0 percent in 1995/96, by 6.5 percent in 1996/97 and by about 5.5 percent thereafter. After the coffee boom, economic growth (which depends to a large extent on imports for investment) will be constrained by export growth. Total *investment* is projected to increase gradually from about 15 percent of GDP in 1994/95 to about 19 percent of GDP by 2002/03. *Private investment* increases from under 8 percent of GDP in 1994/95 to over 11 percent in 2002/03,[10] and *public consumption* increases from under 8 percent of GDP to over 12 percent during the same period, reflecting a change in Uganda's expenditure composition away from private consumption towards private investment and public consumption. Private consumption increases in real per capita terms, but falls as a share of GDP. The increase in public consumption allows a sustainable increase in priority programs of the recurrent budget, such as education, health, agricultural research and extension, water supply, and rural feeder roads.

1.52 The average annual *inflation* rates are projected at around 8 percent in 1994/95, and at around 5 percent thereafter. The Ugandan shilling is assumed to appreciate by about 15 percent in 1994/95 in nominal terms, remain constant in 1995/96 at about 930 shillings per dollar, and depreciate by about 5 percent in 1996/97 and by about 15 percent in 1997/98, returning to its pre-coffee boom level. After 1997/98 the *real exchange* rate is assumed to be constant; the nominal rate will adjust to compensate for domestic and external inflation differentials.

1.53 It is assumed that the current high commodity prices and the structural policy reforms implemented in the last few years will provide a boost to increase the volume of *exports* at 6 to 7 percent over the next few years. These optimistic assumptions are based on the fact that agricultural markets have been fully liberalized, price controls eliminated, processing plants have been or are being privatized and the monopoly of state marketing boards eliminated. The scenario assumes that Uganda will gradually recover its previous (early 1970s) level of exports in its traditional exports (coffee, tea, and cotton) during the next decade. *Other exports* are expected to increase as a share of total merchandise exports from 10 percent in 1994/95 to 24 percent by 2002/03.

1.54 *Imports* of goods and nonfactor services are based on the availability of external inflows (mainly exports, private transfers, foreign investment and foreign aid) and reserve targets in each year. In order to manage its external debt, Uganda has to limit future borrowing mostly to highly concessional terms. It is assumed that *aid disbursements* are maintained in real terms throughout the period, and that the public sector will contract no more than US$15 million dollars of new nonconcessional loans per year. Real annual

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[10] The share of private investment in total investment may be underestimated owing to data problems.

growth rates of imports are low after the coffee boom reflecting the more moderate availability of foreign exchange, but pick up after 1997/98 to about 5 to 5.5 percent.

1.55 The large gap between exports and imports leads to substantial resource balance deficits, which initially decline from about 9 to 9.5 percent in 1994/95 and 1996/97, but increase thereafter from about 11 to 12 percent of GDP. Under more normal conditions, this deficit would be unsustainable and risk a balance-of-payments crisis. However, an abrupt reduction in the trade deficits (i.e. aid) could be harmful for medium-term growth in Uganda, which requires external inflows to accelerate investment in infrastructure and human resource development.

1.56 The results from this scenario underline the fragility of the macroeconomic stability and the need to deepen the structural adjustment over the medium term—in particular, in the areas of public sector reform, improved financial sector performance and improved incentives to exporters. Inaction would increase the potential for a balance-of-payments crisis and high inflation.

2
ACCELERATING ECONOMIC GROWTH: INCENTIVES, EXPORTS AND INVESTMENT

2.1 Macroeconomic stability is a necessary but not a sufficient condition for growth. Future growth in Uganda depends primarily on developments on the real side of the economy. Sustaining and accelerating growth in a small open economy like Uganda requires a strong and diversified export sector, as domestic demand and few commodities prone to large price fluctuations cannot sustain high growth rates in the future. Another important ingredient for future growth is increased private investment in productive capacity, backed by higher public and private saving. In addition, physical and social infrastructure are necessary facilitating factors to complement private investment and provide human capital.

2.2 Growth in Uganda is constrained by a number of factors which affect export development and private investment. The main constraints are poor infrastructure and weak institutions, lack of human capital, including high illiteracy rates and lack of technical and managerial skills, a weak financial sector, and remaining distortions in the incentive regime. Finally, there is a perceived lack of policy credibility which can only change over time, provided reform policies are continued. This chapter focuses mainly on the incentive regime and the aggregate export and investment response. Other constraints and policies to overcome them will be analyzed further in chapter 3 with a view to promoting nontraditional agricultural exports, and in chapter 4 regarding rural infrastructure and human resource development.

2.3 Since the launching of the Economic Reform Program in 1987 the Government of Uganda has been implementing policies, with the support of donors, to address the above constraints. In particular, it has taken important steps to liberalize the economy and shift incentives in favor of the tradable sector and to promote private sector development. The Government also continues to rehabilitate infrastructure and institutions, direct more public funds towards agricultural research and extension, health services and education, and so on. However, due to a long period of economic decline with hardly any investment, insufficient maintenance, collapse of standards and many institutions, and shrinking of the formal sector, resource requirements to overcome the above constraints are huge. In addition, many of the reforms have taken time to gain momentum so that, despite progress in a number of areas, most of the constraints to long-term growth are very much present.

2.4 As to the outcomes of the reforms, overall GDP growth (about 3 percent per capita on average) has been better than private response in exports and investment. As growth is dominated by agriculture, occasional droughts have increased the volatility of

growth performance. The present coffee boom will temporarily boost growth rates in 1994-96. Until now growth has largely been driven by economic recovery (i.e. a gradual increase in the share of marketable and formal activities, and rehabilitation of infrastructure), increased domestic demand and, to a lesser extent, fortuitous regional demand. Exports seem to have not yet responded in the aggregate to improved incentives. However, there are encouraging signs in nontraditional agricultural exports (NTAE) but, as yet, no sign of emerging industrial exports. Aggregate investment also remains low. Its share of GDP has actually declined after the first two years of rehabilitation in 1986-87. A lag in response can be expected, but the decline in aggregate investment is a worrying trend. The composition of investment has also shifted from equipment and machinery to structures, while most private investment has been in the import-substituting sector and rehabilitation of the existing capacity.

2.5 The rest of the chapter investigates the reasons behind the sluggish response in exports and private investment, particularly in export-oriented activities, to trade and exchange rate liberalization and other economic reforms implemented since 1987. It also identifies constraints for promoting exports within the region (Preferential Trade Area, PTA) and outside the region. One of the main findings is that, although substantially reduced since 1987, there is still an antiexport bias embedded in the incentive regime. This policy bias arises because of high effective rates of domestic protection and dependence of public revenue on import taxation. In an economy like Uganda, the ultimate incidence of import taxation falls largely on exporters who are price-takers and cannot shift their higher costs onward. Domestic producers instead have more market power and are hence able to pass on at least part of the additional costs. Policy measures are urgently required to reduce this bias as export growth is vital for Uganda's future growth, which is in danger of eventually stagnating if producers continue to rely on domestic demand alone.

Private Response in Exports, Industrial Production and Investment: Recent Evidence

2.6 One of the overall aims of the economic program in Uganda has been to promote nontraditional exports by reforming both export and import policies. These reforms have been gradually introduced since 1987 (Box 2.1). The removal of explicit export taxes (associated with a nonunified exchange rate regime) and import liberalization did not occur until 1990, making this year the earliest point at which to observe changes in trade, production, and investment patterns. To the extent that producers believe the reforms to be credible and long-lasting, one would anticipate, after an appropriate response lag, a significant increase in the relative incentive to produce for the export market, especially in the more profitable nontraditional sectors. An improvement in incentives should be reflected in production and trade changes in sectors demonstrating a genuine comparative advantage or export potential. Also, investment should move away from the formerly highly protected import substitutes and toward exports.

Box 2.1: Chronology of Trade and Exchange Rate Reforms, 1987-94

1987	Dual trade licensing system introduced. Exemptions on raw materials and capital goods suspended.
1988	Some protective tariffs (sugar, soap) raised. Open general license scheme for imports implemented.
1989	Retention account scheme for export earnings introduced.
1990	Export licensing system replaced with certification system. Forex bureau/parallel foreign exchange market legalized. Duty exemptions on raw materials reintroduced.
1991	Import licensing system replaced with certification system. Investment Code introduced.
1992	Foreign exchange auction market created. Tariff structure rationalized (10 to 50 percent range). Several duties on raw materials abolished. Tax on coffee exports abolished. Coffee marketing board's monopoly removed.
1993	Unified interbank foreign exchange market/floating exchange rate. Surrender of coffee exports receipts waived. Special import surcharges on Kenyan imports applied. Harmonized commodity coding system for imports introduced. System of trade documentation reformed; preshipment requirements introduced. Cross Border Initiative to promote regional trade introduced.
1994	Tariff structure (10 to 30 percent range) further rationalized. Import duties on some raw materials suspended. Tax on coffee exports reintroduced.

2.7 **Export Response**. Despite a substantial liberalization of external trade and the exchange rate system since 1987, particularly since 1990, the ratio of Uganda's exports to GDP (at current market prices) fell from 11 percent in 1985/86 to 6 percent in 1993/94.[11]

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[11] Only the recorded, rather than actual trade response can be reported. The two may diverge for two reasons: the presence of unrecorded trade arising from smuggling and underinvoicing, and the misrecording of reported trade. Both appear to be significant problems in Uganda. The extent of unrecorded trade is difficult to quantify, though it is likely to have declined as a result of export and import liberalization. Differences in tax arrangements and the ease of administration in the formal and informal sectors will affect the amount of unofficial trade. These differences in the incentive to record are also likely to affect the accuracy of trade information compiled from foreign exchange requirements/receipt sources and from customs sources. (The substantial variations in export values recorded in different sources are illustrated in Statistical Annex Table III.2.) In addition, it is likely that current private transfers include earnings from nontraditional exports.

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Table 2.1: INVESTMENT AND EXPORT SHARES OF GDP

In Percent

	Investment/GDP (Current prices)	Exports/GDP (Current prices)	Investments/GDP (Constant prices)	Exports/GDP (Constant prices)
1985/86	7.7	11.3	12.5	8.3
1986/87	9.3	6.6	16.8	7.7
1987/88	10.3	6.0	18.7	7.3
1988/89	10.3	6.7	16.1	7.3
1989/90	11.9	6.0	15.7	7.3
1990/91	14.8	6.1	16.2	6.4
1991/92	15.2	7.2	14.6	7.2
1992/93	14.1	5.5	14.0	6.2
1993/94	12.9	6.1	14.4	8.6
1994/95*	...	11.1	...	7.5

* Estimate.

Source: Statistics Department, MFEP.

The ratio bounced back to the 1985/86 level in 1994/95 because of the high world price for coffee. At constant prices exports have remained between 6 and 9 percent of GDP since 1985/86 (Table 2.1).

2.8 The composition of exports is sensitive to changes in the world price of coffee (Figure 2.1). In addition, there is evidence of a distinct increase in importance of nontraditional agricultural exports, albeit from a very low base (discussed in more detail in chapter 3). The share of manufactures in total exports increased slightly in 1992 and 1993, but manufactured exports contributed a relatively (and absolutely) small share (Table 2.2). There is some suggestion of a shift away from machinery and transport

Figure 2.1: STRUCTURE OF EXPORTS

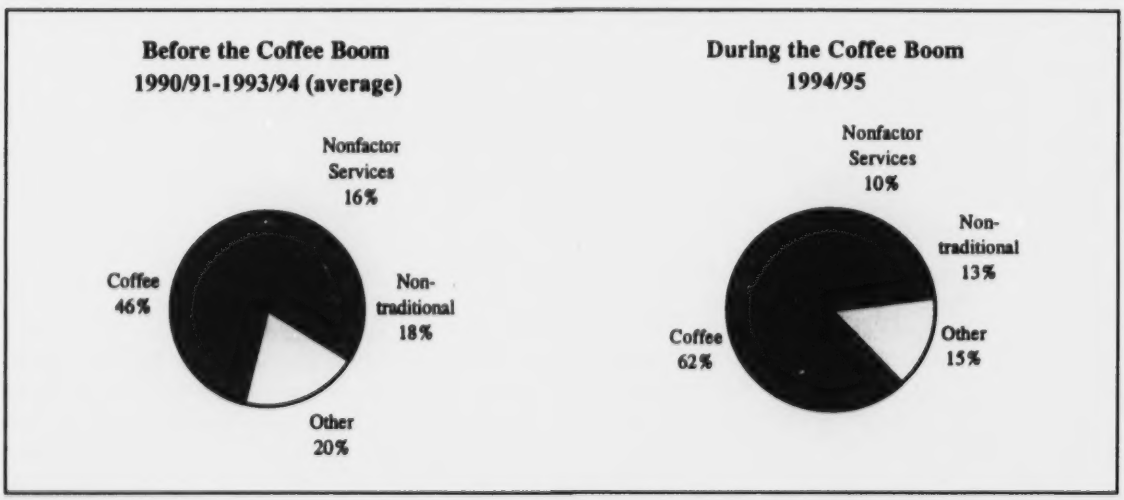


Table 2.2: COMPOSITION OF MERCHANDISE EXPORTS
In Percent

	Shares of Total Exports [a]			Shares of Manufactured Exports			
	Trad. Agr. [b]	Non-Trad. Agr. & Primary Goods [c]	Manuf. [d]	Chemicals	Basic Manuf.	Machinery & Transport Equip.	Misc. Manuf.
1989	90.9	7.6	1.3	2.3	7.6	85.3	4.8
1990	80.3	18.3	1.3	9.8	27.7	52.2	10.3
1991	72.1	21.6	1.3	8.5	25.3	54.4	11.8
1992	74.2	23.7	2.1	9.5	21.1	46.3	23.2
1993	67.5	28.3	4.3	-	-	-	-

[a] Includes SITC 9 (goods not classified by kind).
[b] Coffee, tea, tobacco and cotton.
[c] SITC 0-4 less traditional exports.
[d] SITC 5-8.

Source: Background to the Budget, 1994-95, MFEP, and EPADU for 1993 estimates.

equipment (two activities for which Uganda does not have a comparative advantage) toward exports of basic and miscellaneous manufactures. But the disaggregated data indicate that manufactured exports are made up of a relatively large number of products sold in small quantities to neighboring countries. This type of exporting is more likely to be explained by idiosyncratic factors or distortions, possibly of a transitory nature, than by genuine comparative advantage. Much greater product concentration is expected, judging from the experience of other developing countries that have moved from traditional activities to exporting manufactures to extraregional markets, particularly industrial markets.

2.9 **Industrial Production Response.** Industrial production has increased in each year since 1987, but at a decreasing rate since 1990 (Table 2.3). In four sectors the rate of increase of production was higher in 1990-93—chemicals, bricks and cement, steel and steel products, and miscellaneous, which includes vehicle accessories, electrical products, and plastic products. (That production of these goods has increased is evidence that Uganda has limited Kenya's access to its markets.) Given Uganda's level of technologies and local resources, these should be import-substituting activities, for which there may be some opportunity for interregional, but not for significant extraregional exports. Indeed, the growth of production in these sectors does not seem to be driven by exports. For example, exports of chemicals and plastics, positive in 1987, had fallen to zero by 1992, while exports of electrical products increased in nominal

Table 2.3 CHANGES IN INDUSTRIAL PRODUCTION
In Percent

Industrial Sector	1987-93	1987-90	1990-93
Food processing	146	75	41
Tobacco and beverages	71	55	10
Textiles and clothing	-7	16	-20
Leather and footwear	-32	-25	-9
Timber, paper, and printing	138	84	30
Chemicals, paint, and soap	239	84	85
Bricks and cement	165	54	71
Steel and steel products	159	8	140
Miscellaneous	271	81	105
All items	114	56	38

Source: Background to the Budget, 1994-95, MFEP.

terms by only a small amount between 1987 and 1992. Even in the case of steel and steel products the total value of exports was still very small in 1992.

2.10 **Investment Response**. As shown in Table 2.1 above, the published data do not show either an aggregate export or investment response to the reform program as yet. Indeed, the investment and export-to-GDP ratios have been lower on average in 1990-94 than in 1987-90. Sufficient information is not available on the composition of total investment, however, including the breakdown of total investment in the national accounts into private and public. Currently the latter is estimated from the public investment program and the former is derived as a residual. The sectoral composition of private investment can only be inferred from Uganda Investment Authority (UIA) data on planned and "estimated on the ground" investment, which accounted for about 10 percent of total investment in the economy during 1991-94 (Table 2.4). The low level of private investment is probably caused partly by limited public investment in infrastructure. Removal of the implicit subsidy which imported capital goods enjoyed during the long period of overvalued exchange rate may be another factor that adversely affects investment in machinery and equipment. The remaining antiexport bias, perceived high non-commercial risk and insufficient scale of production to yield externalities to investors are also likely to explain the observed slowness of response.

Table 2.4: COMPOSITION OF PLANNED AND ESTIMATED ON-GROUND INVESTMENT IN UIA MONITORED PROJECTS: MANUFACTURING SECTOR

In Percent

	Shares of Total Manufacturing		Implementation Ratio (Licensed/on-ground)
	Planned	Estimated On-Ground	
Food processing	35.1	45.9	0.43
Tobacco and beverages	2.9	2.1	0.24
Textiles and clothing	3.7	1.3	0.11
Leather and footwear	3.4	1.2	0.12
Timber, paper, and printing	5.8	4.7	0.26
Chemicals, paint, and soap	25.7	19.1	0.24
Bricks and cement	7.5	7.5	0.33
Steel and steel products	7.0	12.7	0.59
Miscellaneous	7.5	5.4	0.23

Source: Based on end-June 1995 data supplied by UIA.

2.11 Most of the post-1991 investment has gone into the manufacturing sector, which accounts for more than 70 percent of the on-ground investment. Ugandan manufactures are largely import substitutes, but around 40 percent of manufacturing investment has been agro-based. Some of the food processing activities are nontraditional export activities. The overall picture in 1991-94, however, is not one of investment being directed toward export-oriented activities. This observation is confirmed by a recent

survey of a large number of domestic firms.[12] Only 8 percent of these firms' output was (reported to be) exported in 1995—mainly to regional markets—compared with 7 percent in 1991. In line with the production changes in this period, a significant proportion of on-ground investment has gone to the chemical and steel subsectors, while recorded exports of chemicals fell to zero by 1992.

2.12 Increased private investment is critical for future growth. There is some empirical evidence from other countries that private investment in machinery and equipment has the strongest correlation with high growth rates.[13] For Uganda this result would suggest that the current construction boom, though a positive development and a sign of increased confidence, may not produce high growth rates that are sustainable. As shown in Table 2.5, the share of machinery and equipment in investment has fallen quite dramatically since 1987/88. Also, Uganda's low international credit ratings, may preclude substantial inflows of foreign investment in the near future.[14] Hence, in the medium term, growth is likely to depend more on the recovery of domestic investment.

Table 2.5: FIXED INVESTMENT AND TRADE POLICY
Indices at 1991 Constant Prices

	GDP at MP	Exchange Rate Premium	Fixed Investment	Structures	Equipment
1985/86	100	100	100	100	100
1986/87	104	246	137	130	145
1987/88	113	227	168	160	178
1988/89	120	107	159	159	160
1989/90	127	65	161	167	155
1990/91	133	24	168	182	150
1991/92	137	9	162	189	129
1992/93	149	2	163	205	112
1993/94	157	2	179	231	116

Note: The exchange rate premium is the parallel (bureau) rate over the official rate.
Source: Statistics Departments, MFEP and BOU.

2.13 Despite the sluggish investment response to date, there are some positive factors which may be able to improve the present trend. According to a 1993 survey of actual and potential foreign investors, for example, reform of the regulatory and incentive environment has made Uganda more attractive to investors than many other African countries. Nonetheless, the risk of policy reversal, political instability, and lack of power and telecommunications infrastructure were perceived as major deterrents.[15] Compared with Kenya, Uganda's greatest disadvantage was perceived to be in the labor market. Its

12 The World Bank and the Uganda Manufacturers Association (1995).

13 DeLong, B. and L. Summers (1991).

14 The average rating of the Institutional Investor International for low-and middle-income countries was 35 in 1993 (100 is risk-free). For Sub-Saharan Africa it was 15.3 and for Uganda it was 7.3, an improvement of only 2.0 points since 1987. Another credit rating company, Dun and Bradstreet International, shows a somewhat brighter picture by rating Uganda 4d on a scale of 1(a-d) to 7. Uganda is on par with Ghana and ranked the 10th best of the 23 African countries that were rated.

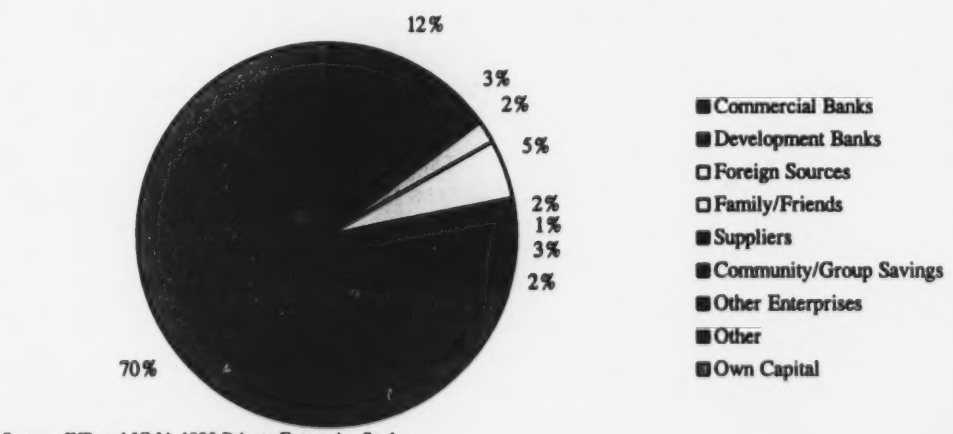
15 World Bank (1994c).

shortage of skilled workers and management capacity reflects past neglect of education and the exodus of skilled labor. This calls for accelerating human resource development as a long-term solution. In the short term, this process can be assisted by educated Ugandans returning from abroad and by promoting on-the-job training of the work force.

2.14 The limits to attracting foreign investment—apart from returning Asians who have been allowed to repossess their expropriated properties—makes domestic private investment all the more important. Domestic firms see the constraints to their future operation and growth as different than those cited by their foreign counterparts. Domestic firms feel that the most severe obstacle is high taxation followed by the cost of and access to finance. The banking system—both commercial and investment banks—is only equipped to lend very small amounts for investment. The culture of nonrepayment is well-rooted, and the judiciary does not regularly permit lenders to foreclose on collateral. Loans are like equity in that they carry a high risk and are not recoverable.

2.15 However, even in industrial economies about 80 percent of investment is financed from retained earnings. Ugandan firms report that 70 percent of their capital is self-financed (Figure 2.2). Corporate taxation is the policy which most directly affects profits. At the same time, it is inevitable for the future macroeconomic stability that the share of public revenue in GDP has to increase. In order not to overburden the small formal enterprise sector and adversely affect private investment, tax rates do not have much room to go up. Hence, the increase in public revenue, which can be gradual at best, must come from expanding the presently small tax base. Despite the importance of retained earnings, the banking sector needs to be able to provide loans for investment and working

Figure 2.2: FINANCIAL STRUCTURE OF UGANDAN FIRMS



Source: WB and UMA 1995 Private Enterprise Study.

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capital at reasonable interest rates, mobilize savings, and smooth the impact of commodity booms by providing farmers and entrepreneurs a way to accumulate financial savings prior to making investment decisions. As seen in chapter 1, the financial sector continues to perform extremely poorly, and slow reform efforts are a serious impediment to private economic activity, investment, and growth.

EFFECTIVE PROTECTION

2.16 As seen above, there has been a substantial liberalization of the trade and foreign exchange regimes and reduction in the antiexport bias, involving exchange rate unification, retention of export earnings, elimination of most quantitative restrictions, and some rationalization and reduction of tariffs (Box 2.1). To investigate whether there has been an effective and adequate reduction in the antiexport bias, it is useful to examine the pattern of incentives, captured by the *effective rates of protection*[16] across different activities and markets (Tables 2.6 and 2.7).[17]

2.17 The effective rate of protection varies considerably across sectors and products. This variation is not uncommon where there is a mixture of tariffs and quantitative restrictions, pervasive duty exemptions and administrative discretion, and variation in local value-added (at international prices) across activities. Indeed, some products show

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16 This measure captures the net protection accorded to a particular stage of production. It allows for both the protective or subsidizing effect of tariffs on competing final imports and for the disprotective or taxing effect of tariffs on intermediate inputs or raw materials used in this stage of production. For example, assume that a 30 percent import duty applies to imports of a final consumer good, while local producers of the final good pay a 10 percent (t_i) duty on an imported input which makes up 50 percent of the pre-tax cost of product, (a_{ij}). In other words, the value added is 50 percent. The nominal rate of protection (t_j) in the absence of any quantitative restrictions is, therefore, 30 percent but the effective rate of protection is 50 percent, i.e. the percentage increase in the net price of the final good. For this simple case of one good j the formula for effective protection (e_j) is:

$$e_j = \frac{t_j - (a_{ij})\, t_i}{1 - a_{ij}}$$

Note the e_j increases as a_{ij} increases even if t_j and t_i are constant. Thus for this same pattern of nominal tariffs, a lower value-added activity, i.e. a_{ij} = 80 percent would be subject to an effective rate of protection of 110 percent. Similarly, if the domestic producer is exempted from tariffs on intermediate inputs, as often is the case in Uganda, the effective rate of protection increases from 50 to 60 percent.

17 The two sets of values reproduced in Table 2.6 are not directly comparable, since one gives product level estimates and the other averages across a sample of products in each sector. There are also differences in the estimates because of the differences in the means used to estimate nominal protection by the two studies. The Louis Berger study uses only scheduled tariffs to estimate nominal protection, which will overstate protection, for example, where exemptions or smuggling is important and understate protection where QRs are present. The Maxwell Stamp methodology is more ambitious and based on domestic and import price comparisons.

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Table 2.6: RECENT EVIDENCE ON EFFECTIVE PROTECTION LEVELS

Maxwell Stamp (1993) a/		Louis Berger (1993) b/	
Product	%	Sector	%
Electronic assembly	38.2	Steel products	68.0
Electrical assembly	57.4	Engineering	V.A.<0
Brewing	166.8	Paper, packaging, printing	90.0
Clothing	77.3	Wood and related products	V.A.<0
Dairy products	-23.0	Agro-processing	39.0
Fish processing	-9.3	Paint	61.0
Footwear	32.8	Plastics	53.0
Grain milling	101.1	Textiles and clothing	75.0
Horticulture	-20.0	Leather and leather products	6.0
Leather	-2.1	Beverages	92.0
Light engineering	147.6		
Misc. manufacturing	19.6		
Paints	435.4		
Paper products	17.3		
Plastic goods	20.0		
Soft drinks	49.8		
Spirits	V.A.<0		
Sugar	-8.7		
Tea and coffee	-2.0		
Textiles	-40.0		
Timber processing	1.3		
Tobacco products	3563.3		
Tires	14.9		

a/ Against extra-regional (non-PTA) competition in the domestic market using estimates of nominal protection resulting from both tariffs and QRs (1992 data). (Alternative estimates based on scheduled tariffs and rates of import duty collection are also reported in the study.)

b/ As in (1) except using scheduled tariffs (pre-July 1992) as indicators of nominal protection.

Note: V.A.<0 Indicates negative value-added at world prices.

Source: Maxwell Stamp and Louis Berger.

negative rates of effective protection in Maxwell Stamp's (1993) data.[18] Again, this result is not unusual; it might be explained by downward pressure on nominal protection induced by smuggling, regional competition, or the relative unimportance of local sales (true of most export sectors). Similarly, for primary and agricultural activities that involve little processing, the escalation of the tariff structure may mean that some inputs are more highly taxed than their outputs. Overall, however, the average rates of protection in domestic sales of around 60 percent are not out of line with rates of protection found in many other developing countries at a comparable stage of industrialization and trade liberalization. But these countries should not necessarily be considered a standard of achievement. What is important is how the incentives for import-substitution affect export promotion in Uganda.

[18] Uganda Investment Authority (1993).

Table 2.7: RE-ESTIMATED EFFECTIVE RATES OF TARIFF PROTECTION [a/]

In Percent

	In Domestic Sales		
	From Extra-Regional Competition	From PTA Competition	In Export Sales Extra-PTA Markets
Electronic assembly	47.8	47.8	-27.4
Electrical assembly	68.9	32.4	-4.2
Brewing	166.9	166.9	-24.3
Clothing	219.9	98.9	-38.2
Dairy products	23.6	-10.3	-48.7
Fish processing	110.9	95.9	-9.4
Footwear	35.6	18.2	-1.5
Grain milling	281.8	185.7	-25.9
Horticulture	24.3	24.3	-21.1
Leather	60.8	15.5	-2.2
Light engineering	77.2	34.1	-9.1
Misc. manufacturing	53.1	29.3	-23.6
Paints	181.2	130.4	-5.2
Paper products	36.5	5.0	-26.5
Plastic goods	34.9	16.3	-2.4
Soft drinks	75.3	75.3	-18.8
Sugar	34.0	10.7	-17.4
Tea and coffee	41.1	41.1	-2.0
Timber processing	99.2	42.9	-0.9
Tobacco products	265.7	265.7	-10.7
Tires	19.3	16.9	-10.3
Unweighted average	93.2	63.9	-15.7

[a/] These are approximations given the methods used to derive the 'average technologies' and given the ability to only crudely match products with product ranges in the tariff schedule. This is particularly so in the case of the PTA tariffs.

Source: Staff Estimates.

2.18 The above levels of effective protection imply a significant bias in favor of import substitution and against exports. Since tariffs and quantitative restrictions do not benefit export sales and since there is no compensating export subsidization, effective protection levels in export sales will either be zero, if there is no taxation of inputs, or negative if there is. However, the biases, particularly the antiexport bias, should be lower in 1994 than in the studies based on 1992 data because trade policy has been further liberalized. Reforms include reduced coverage of the negative list and the narrowing of the spread of tariffs between final and intermediate imports.

2.19 **Revised Estimates of Effective Protection**. After revisiting the rates of effective protection, we find that effective protection is still high in Uganda. The average rate of effective protection against extraregional competition is calculated to be greater than 90

percent (Table 2.7). [19] However, this figure is upwardly biased in those sectors where smuggling is pervasive and where PTA competition is most intense. It is downwardly biased where transportation costs provide natural protection against extraregional imports. But such caveats about precision should not obscure the fact that there is a substantial degree of antiexport bias in the present tariff schedule. The bias is especially pronounced for low value-added manufacturing activities. In these activities even relatively modest escalation of tariffs on intermediate and final goods translates into high rates of effective protection. This tendency is exacerbated by the current practice of granting widespread exemptions from duties and sales tax on imported raw materials and also other goods.

Hidden Sources of Antiexport Bias

2.20 Uganda's antiexport bias is found in the implicit rather than explicit taxation of exports (except for coffee exports, which are also explicitly taxed). The bias takes two conceptual forms: relative and absolute taxation. Absolute taxation is evidenced by consistently negative rates of effective protection in export sales as demonstrated above. For example, directly imported raw materials and intermediate inputs may be subject to tariffs and other border taxes. Duty drawback, which would offset such input tariffs, is available to Ugandan producers. However, the scheme has not operated effectively (even though it was recently strengthened following criticism that funds were not available to support the arrangement).

2.21 Relative taxation is likely to arise from the indirect price-raising effect of import barriers: higher prices of goods not directly imported by exporters (such as petroleum products), higher prices of locally produced but protected inputs, and higher priced nontradable inputs. In other words, exports are implicitly "taxed" by import barriers. Exporters in Uganda are more handicapped by high-cost inputs than producers selling to the domestic market because exporters are price-takers in international markets. Producers selling to domestic markets, on the other hand, have a greater ability to recover such high costs by passing them on (at least partly) to consumers. This disadvantage,

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[19] The earlier studies are not fully comparable with revised estimates presented here, as they biased the measurements downward somewhat by their choice of price data. The Louis Berger (1993) study does not capture the effects of quantitative restrictions, while the Maxwell Stamp (1993) study uses regional/Kenyan prices as the proxy for world prices when measuring nominal protection. Clearly, the measurement of nominal protection in a world of quantitative restrictions, differential tariffs from PTA and non-PTA sources, smuggling, tariff evasion, duty exemptions, and quality differences between local and imported goods, is problematic—there is no precise or unique methodology for its measurement. But competition from regional imports does not mean that there is little or no protection against extraregional imports. The regional (PTA) market is itself protected against extraregional imports. The common or lowest trade barriers against extraregional imports which apply across the region, are likely to define the level of protection. Support for this interpretation is provided by an analysis of the shares of intermediate inputs (measured at world prices) implied by the estimates of the effective protection report in Table 2.6.

which cannot be alleviated by a conventional drawback mechanism, constitutes a hidden tax that is a disincentive to export production.[20]

2.22 The implicit taxation of exports can also be explained by the impact on the exchange rate. Trade barriers cause the value of foreign exchange earnings to fall with import demand. This drop is equivalent to an appreciation of the shilling.[21] In Uganda the policy discussion has been more concerned with appreciation arising from increases in the foreign exchange supply attributed to aid, private inflows, and coffee exports. Regardless of the case, appreciation means that tradable goods prices are lower in domestic currency terms than they would be relative to nontradables (if no appreciation had taken place). In other words, domestically produced importables and exports suffer alike. But importables are "compensated" to the extent that they enjoy protection.

Box 2.2: Incidence of Import Duties

Import taxes are shifted to the export sector because ultimately export earnings can only be used to purchase imports. If a kilo of coffee trades for ten bars of soap on the world market and there is a 20 percent import duty on soap, then within Uganda a kilo of coffee only buys eight bars of soap (the other two bars accrue to the Government as an import duty). If the coffee sector bought only nontradables then its offer of a kilo of coffee is worth only eight bars of soap to the nontradable sector, and so the coffee sector will receive nontradables worth only eight bars of soap: the incidence of the extra import duties falls on the coffee sector no matter what it purchases.

TRADE POLICY AGENDA

2.23 **Reduction of the Antiexport Bias.** As shown above, the average rate of effective protection remains at more than 90 percent because of a cascading tariff structure, widespread exemptions on raw materials and intermediate goods, and low levels of value added. Also, despite widespread exemptions, around 37 percent of the c.i.f. value of imports is collected as various import taxes. The antiexport bias results from both these sources. The hidden bias that results from the incidence of import taxes is attributable to exporters' inability to pass their additional costs onto their clients. In other words, the ultimate incidence of import taxation falls, to a large extent, on those who earn foreign exchange—agricultural exporters in particular.

2.24 In order to reduce the antiexport bias, the Government should expeditiously abolish most exemptions from duties, sales taxes and excise taxes on imported inputs, keep these taxes relatively low, and lower the tariffs and other remaining restrictions on final goods imports. In the long run the Government must move from international trade taxes toward direct taxes and VAT. It is important to make the duty drawbook system

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20 Empirical estimations for a number of Latin American countries indicate that the proportion of import taxes paid by exporters vary from 53 percent in Uruguay to 90 percent in Colombia (Clements and Sjaastad 1984).

21 Krueger, Schiff, and Valdes (1991).

operational and effective as soon as possible. The revision of the Investment Code should also be completed without delay.

2.25 Apart from the remaining antiexport bias, macroeconomic policies are now less constraining to private sector development, investment, and export growth. But a whole range of microeconomic barriers continue to deter investors and prevent investment from becoming more productive and efficient. To promote domestic competition and efficiency, all firms must be treated alike. More than 70 percent of domestic firms surveyed in 1995 complained about unequal treatment in tax exemptions.

2.26 The recent appreciation of the nominal and real exchange rates (in 1993/94, prior to the coffee boom) has been a concern to policymakers and exporters as it is a disincentive on export growth and diversification. At present these concerns have dissipated as the nominal and real exchange rate have remained fairly stable since mid-1994. The effect of this constraint depends on the extent and duration of the appreciation. In Uganda the industrial sector is small. Appreciation cannot therefore crowd out large amounts of manufactured exports. Much of the capacity in this sector is oriented toward local markets, and there is not much evidence of an increase in export-oriented investment. If the appreciation persisted, however, export diversification would most likely be delayed.

2.27 **Regional and Global Export Promotion**. In 1993, fourteen countries in Eastern and Southern Africa and the Indian Ocean agreed to implement outward-oriented regional trade liberalization and integration under the Cross Border Initiative. The initiative, which is supported by the IMF, the European Union, the African Development Bank, and the World Bank, focuses on eliminating nontariff barriers, harmonizing tariffs based on a low and simple structure, and harmonizing investment policies and incentives. Internal tariff reduction (ongoing under COMESA agreements) would be matched by reductions in external tariffs with a view to avoiding trade diverting increases in tariffs. In March 1995 the countries endorsed a "road map" to undertake the tariff reductions and harmonizations by 1998. The initiative allows subgroups of countries to form customs unions. In this context Uganda has indicated its intention, jointly with Kenya and Tanzania, to revive East African cooperation by establishing a secretariat in Arusha, Tanzania and by beginning to form a customs union in the region. The Cross Border Initiative emphasizes creating a low external tariff structure as part of a sustainable extraregional export strategy.

2.28 Discriminatory regional liberalization may allow Uganda to increase its exports of industrial goods (as a result of trade creation or diversion). To the extent that this policy fosters regional import substitution that is less costly than domestic import substitution, it is an improvement in efficiency. But discriminatory regional liberalization risks sustaining or introducing new barriers to the promotion of extraregional exports. Among Uganda, Kenya, and Tanzania (the countries forming a customs union), Uganda has the lowest external tariffs. Thus the relative disincentive against exporting outside of the free trade area would remain, and would be higher if a common external tariff structure was

negotiated that was higher than Uganda's current tariffs. This increase is possible given the incentive for producers in the highly protected economies to lobby for the retention of current protection levels. Thus discriminatory regional liberalization risks frustrating one of Uganda's key reform objectives: export promotion. There is much less risk of nondiscriminatory trade liberalization frustrating regional export promotion: exports that are competitive outside the region will be competitive within the region.

2.29 This analysis argues that regional liberalization of trade is not an adequate substitute for extraregional trade liberalization in Uganda. An early commitment to a low common external tariff structure (ideally lower than Uganda's current tariff structure) would reduce the risk of costly trade diversion and would lower antiexport bias. Once committed to common external tariffs, Uganda's ability to affect discrimination and reverse its antiexport bias (in extraregional trade) would be seriously constrained.

3
EXPORT RESPONSE AND INVESTMENT IN AGRICULTURE

3.1 Over the 1971-1985 period, Uganda's agricultural sector was badly disrupted by the country's political and military turmoil and insecurity of market activities relative to subsistence farming and the breakdown of infrastructure and support services. While total food crop production was maintained, this period witnessed the virtual collapse of the country's cotton, tea, sugar, and tobacco industries. Among major agro-industries, only coffee survived the period of turmoil without a large decline in output. As a result, by the late 1980s, coffee accounted for more than 95 percent of Uganda's agricultural exports and 90 percent of its total merchandise exports. In the past few years, the costs and risks of such a high degree of export concentration have been graphically illustrated. The collapse of international coffee prices during the late 1980s and early 1990s was a major factor in the deterioration of Uganda's balance of payments, debt-servicing ratio, and increased dependence on international financial assistance. As a result, there has been growing attention given to the prospects and support for nontraditional exports, especially for agricultural products. Indeed, over the past four to five years Uganda's nontraditional agricultural exports (NTAE) have grown rapidly, somewhat eclipsing the dominance of coffee in foreign exchange earnings, and making a contribution to employment, income generation, and private sector development within the country.

3.2 This chapter focuses on the prospects for Uganda's agricultural exports as the main source of growth, particularly nontraditional agricultural exports. Based upon existing data, enterprise surveys, and subsector studies, as well as the results of field work in Uganda, this chapter: (i) reviews the development of NTAE over the 1988 to 1994 period; (ii) examines patterns of investment, organization, and institutional support for NTAE during this period; (iii) provides a summary analysis of various indicators of NTAE competitiveness, efficiency, and development impact; (iv) assesses the future prospects for Ugandan NTAE development; and (v) recommends policies and areas for public support. While the importance of coffee, cotton, and tea for the generation of foreign exchange has declined due to low world prices and competition from NTAE, they still represent the mainstay of Uganda's current exports. Revival of these industries has been a significant element in the Government's effort to increase export revenue in the short term. A brief summary of the future prospects of these crops therefore precedes the analysis of NTAE.

TRADITIONAL CASH CROPS

3.3 **Coffee** is the largest source of export revenue for Uganda, although its share has declined to around 65 percent of merchandise exports in recent years. About 85 percent of

Box 3.1: Reforms in the Coffee Sector

1990/91	Separating the regulatory and trading functions of the Coffee Marketing Board (CMB), dividing it into two new institutions, Uganda Coffee Development Authority (UCDA) and Coffee Marketing Board Ltd., and removing CMB's monopoly in the export of coffee. At present there are well over 100 coffee exporters in Uganda.
1991	Transferring crop financing functions for the coffee sector from the Bank of Uganda. Removing controls on producer prices, processing and export margins, allowing farmers' price and other margins to be determined by market forces. A floor price remained for exports.
1992	Reducing implicit taxation of coffee exports, by exchanging coffee proceeds at the bureau exchange rate, removing export taxes.
1993	No longer requiring exporters to surrender proceeds to the Bank of Uganda.
1994	An export tax was reimposed in the wake of the coffee boom.
1995	Abolition of the export floor price for coffee.

Uganda's coffee exports are *robusta*. They constitute about 15 percent of world trade in this type of coffee. Coffee output has oscillated between 100,000 and 150,000 tons over the past 10 years, well below the 200,000-ton average of the early 1970s. Incentives to improve quality and productivity had deteriorated under a restrictive regime of monopoly exports, high taxation, and inefficient support services. In order to redress this situation, the Government launched a market liberalization program in 1990 which has brought about significant change (Box 3.1).

3.4 The liberalization of the coffee market coincided with the sharp decline in world coffee prices. Although it was a difficult time to introduce new policies, liberalization nevertheless helped in sustaining coffee sector performance, including exports under adverse market conditions. The liberalization policy has had the following effects:

- Farmers are now paid promptly and, despite low international prices (before June 1994), real producer prices have almost doubled since 1989;
- Farmers now have an incentive to tend existing coffee trees and to plant high yielding varieties. This will hopefully reverse the current decline in productivity and exports, as well as enhance quality;
- Export prices fetched by Ugandan coffee (relative to average international prices) have improved, and some new markets have been penetrated;
- Efficiency and cost effectiveness at all levels of the marketing chain have improved, enhancing Uganda's competitive position in the world coffee market.

3.5 However, the principal structural problem in the coffee sector continues to be low production and farm level productivity. In spite of improvements in farmers' incentives, coffee deliveries remain low. The neglect and poor management during the 1970s also contributed to deterioration in the productivity of coffee trees. Many of the coffee trees are over 40-50 years old and have reached the end of their economic life. The program to increase productivity and raise quality includes measures to increase the replacement of: (i) the aging *robusta* trees using the new clonal varieties which are high yielding, disease-resistant and produce a crop of a better quality; and (ii) old arabica trees with new stock.

3.6 The current productivity of *robusta* nurseries, operated by the Government is low due to inadequate budgetary support and lack of appropriate technology and know-how. The Government nurseries cannot cope with the demand. At prevailing market prices, however, operation of a nursery should be commercially viable. To facilitate private replanting efforts for *robusta* coffee, a two-pronged strategy is recommended: (i) confirming clonal suitability, i.e. disease-resistance and quality of the existing six *robusta* clones, (ii) improvement of nursery technology. An important impediment to the expansion of a*rabica* production is the susceptibility to disease of the current varieties. The cost of combating disease, and raising yields to reasonable levels is excessive. The introduction of new, disease-resistant varieties, which are available elsewhere in Africa and South America, should be a priority.

3.7 **Cotton**. The cotton sector in Uganda collapsed in the early 1970s, due to the disruption of the ginning industry by the Amin government. From 470,000 bales of lint, production declined to some 30,000 bales in 1980, increased and then declined again, before picking up to its current level of around 40,000 bales. Many cotton farmers shifted to growing foodcrops. The problems facing the industry included the disruptions caused by civil war, the takeover of the ginneries (mostly privately owned) by the cooperative unions in the early 1970s which encountered difficulties in financing and managing these enterprises, and the centralized management of pricing and export activities by the monopoly Lint Marketing Board (LMB). Farmers' incentives for production were eroded by predatory pricing policies, delays in making payments, and constant overvaluation of the exchange rate.

3.8 In a series of adjustments which parallel the efforts in the coffee sector, the Government has removed the LMB's monopoly on export marketing, and established a Cotton Development Organization to monitor developments in the sector, and promote its interests. Ginning enterprises are being restructured, introducing new ownership and management where required, and reducing the often overwhelming debt burden. A series of measures are underway to improve seed production and distribution, access to credit by farmers, and strengthen the research and extension effort designed to improve the productivity and quality of this crop.

3.9 However, the actions taken so far are not sufficient to attract private sector participation and to encourage production by smallholders. There is a "wait and see" attitude to investment in cotton. Marketing and processing inefficiency, shortage of

inputs, and the lack of hand tools, oxen and mechanical power for opening up land are the major problems that cotton farmers, who often are poor, are faced with. To reverse these adverse conditions, restructuring of the ginning industry, including debt relief arrangements, has to be completed expeditiously.

3.10 **Tea** exports have rebounded dramatically in recent years. Exports have risen from 2,000 to 3,000 tons of made tea per annum in the late 1980s to some 10,000 tons in 1993. A major recent accomplishment in the tea sector includes the repossession of tea estates by their former owners. This has put in place the incentives for further investment and rehabilitation. Moreover, tea factories and estates held by the parastatal Agricultural Enterprise Ltd. have recently been sold to a private company, and government shares in joint venture companies have also been divested. The ownership of some of the factories catering to smallholder tea producers is gradually being transferred to the smallholder farmers themselves.

3.11 The resolution of these long-standing issues would facilitate the resumption of growth in the tea sector over the next few years, despite less positive prospects at present in the international markets. There are also problems that require urgent action. The smallholder tea farms are only gradually being rehabilitated. Smallholder factories that were abandoned have not been replaced or rehabilitated. Poor tea crop management, combined with poor handling and transport of green leaf tea, and poor factory facilities and quality control have become major causes for the steady decline in tea export prices. Therefore, actions are required to improve farm yields, product quality and factory efficiency.

DEVELOPMENT OF NONTRADITIONAL AGRICULTURAL EXPORTS IN 1988-94

3.12 As shown in Table 3.1, Uganda's NTAE increased from only US$1.4 million to more than US$75 million between 1988 and 1993. Befitting Uganda's excellent and varied natural resource base, NTAE have taken varied forms, including:

- *Low-value food staples*: maize, other cereals, and beans sold in the regional market;
- *Fish and animal products*: fresh and frozen Nile perch fillets, animal skins, and other animal by-products sold in Europe, the Middle East, and to neighboring countries;
- *Spices and high-value industrial crops*: vanilla, chilies, ginger, pyrethrum, silk cocoons, and cocoa sold in Europe, the Middle East, and Japan;
- *Oilseeds*: sesame seed sold in Europe, the Middle East, and Japan, and groundnuts, and soybeans sold in the regional market;
- *Horticultural crops*: roses, vegetables, and pineapples sold in Europe, and bananas sold in the regional market; and
- *Timber and wood products*: sold in Europe.

Table 3.1: NONTRADITIONAL AGRICULTURAL EXPORTS

FOB Value, In Millions of US$

	Actual						Projected				
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Maize	*	0.22	3.26	4.19	3.89	19.88	35.00	34.00	40.00	44.00	48.00
						(36.48)					
Other cereals	0.06	0.06	0.16	0.56	0.58	2.20	1.80	2.00	2.20	2.40	2.40
Beans	*	2.69	2.51	4.15	4.28	12.47	16.00	17.50	18.00	19.50	21.00
						(15.08)					
Fish	0.26	0.74	1.39	5.31	6.49	8.97	14.00	24.00	36.00	40.00	42.00
Hides/skins	0.37	6.10	6.17	4.41	4.06	5.96	5.00	6.00	6.50	7.00	7.50
Sesame	*	1.01	5.23	10.52	6.48	2.75	1.50	1.50	1.75	3.50	4.10
Vanilla	*	*	*	0.18	0.17	0.39	0.56	1.10	1.80	2.60	3.50
Other spices	0.12	0.18	0.12	0.32	0.31	0.47	0.30	0.50	0.65	0.85	1.00
Cocoa beans	*	*	0.50	0.37	0.28	0.71	0.85	0.75	0.75	0.75	0.75
Fruit/vegetables	0.58	0.53	0.95	0.60	0.41	0.66	0.80	1.25	2.75	4.00	6.00
Timber	..	0.71	0.86	0.36	0.12	0.50	1.00	1.25	1.50	2.00	2.25
Groundnuts/soybeans	..	0.04	0.08	0.12	1.12	0.84	0.75	0.75	0.75	0.75	0.75
Roses/other cut flowers	..	*	*	*	*	0.21	3.00	9.00	12.00	15.00	18.00
Pyrethrum	*	*	*	*	*	*	*	1.50	3.10	4.90	6.50
Silk/cocoons	*	*	*	*	*	0.01	0.08	0.75	1.70	2.30	2.75
Total NTAE	1.39	12.28	21.23	31.09	28.19	56.02	80.64	101.85	129.45	149.55	166.50
						(75.23)					
Total trad. agr exports	271.40	270.60	151.80	140.60	116.70	127.10					
Total all agr exports	272.79	282.88	173.03	171.69	144.89	183.12					
						(202.33)					
% share of NTAE	0.5	4.3	12.3	18.1	19.5	30.6					
						(37.2)					

Source: Agricultural Secretariat and staff calculations.

3.13 While consisting of a broad array of individual products, Uganda's NTAE are presently dominated in value terms by a limited number of items: the most important are maize (48 percent of the total value in 1993), beans (20 percent), fish products (12 percent), and hides/skins (8 percent). Trade for all the other commodities totals less than US$10 million, with trade in high-value spices, horticultural crops, and other specialty products not exceeding US$2 million.

3.14 Table 3.1 also illustrates the erratic pattern in the trade development for most NTAE. The initial jump (1988 to 1989) can be largely attributed to the development of (unprofitable) barter deals involving exports of hides and skins and to the formal recording of previously unrecorded informal regional trade in low-value staples. The second jump (1989 to 1991) was due to a short-term surge in sesame seed exports, and to growth in the maize and fish product trade. The most recent jump (1992 to 1994) was primarily due to a large increase in maize and bean exports. Of the above commodities, only in the case of fish products has there been a steady increase in trade levels over this period. For all other commodities, trade levels have either been erratic or have remained

insignificant to date. As will be discussed below, exogenous shocks have strongly influenced NTAE development thus far, while the development of trade in high-value and specialty commodities has featured an extended gestation period.

3.15 During the period considered, several investments, policies, and reforms enacted by the Government of Uganda have helped to facilitate the development or revival of NTAE. These measures have included:

- The rehabilitation of infrastructure, particularly of primary and secondary roads;
- The reform of the foreign exchange regime, including the licensing of private foreign exchange bureaus and the provisions for foreign exchange accounts;
- The depreciation of the Ugandan shilling from U Sh 400 per US$1 in 1988 to a peak of 1,240 per US$1 in April 1993;
- The liberalization of agricultural markets and prices, first in the domestic market for food crops (1988) and later in the export of these crops (1990) and of traditional export crops (1991);
- The enactment of a new Investment Code and the creation of the Uganda Investment Authority (UIA), which assist new investors;
- The simplification of export and cross-border trade procedures; and
- The Government's encouragement of former Ugandan Asians to return to the country through assistance in reclaiming their properties and businesses.

3.16 Most of these measures have reduced the barriers to entry by small-to-medium-scale agro-enterprises and have reduced the transaction costs associated with investment and trade. However, the general (and erratic) patterns of NTAE in recent years have been as or even more importantly influenced by various exogenous factors, with both positive and negative effects. Among the most significant of these exogenous factors have been:

- The 1990-91 drought in Sudan which, together with that country's overvalued exchange rate and political turbulence, created a short-term vacuum in the international sesame market;
- The Iraqi invasion of Kuwait and the subsequent Gulf War which led to an increase in petroleum prices and hence air-freight and road freight rates, and to disruption in trading channels, affecting Uganda's exports of hides, skins, ginger, and sesame;
- Recent political uncertainty in Kenya which has led some Kenyan entrepreneurs to invest in Uganda;
- Events in Rwanda which initially in 1991-92 resulted in a drop in cross-border trade and the bankruptcy of many traders, and then later in 1993-94 provided enormous opportunities for Ugandan supplies of low-value foods to international relief agencies; and
- The severe drought faced by Kenya (and parts of Uganda) in 1993-94 which expanded opportunities for profitable cross-border trade.

3.17 Both the sesame trade in the early 1990s and the more recent maize and beans boom have had 'gold rush' characteristics, including a sudden increase in demand, the entry of many new traders, a rapid and large increase in price, only to be followed by a subsequent collapse in prices and the bankruptcy of many of the new and already established firms. In the case of sesame, the basis for the short-lived Ugandan 'gold rush' was a serious drought in 1990-91 in Sudan, then a leading supplier to the Middle East and European markets. The drought, combined with the overvaluation of the Sudanese currency and the political and economic isolation of Sudan due to its stance during the Gulf War, created a shortfall in the international sesame market and a big opportunity for Uganda. Between 1990 and 1992, the price of Ugandan sesame seed doubled to nearly US$700 per ton (f.o.b. Mombasa). This stimulated a 40 percent increase in sesame plantings and brought about the increased commercialization of what had been largely a subsistence or locally traded crop. During these boom years there was much discussion about sesame becoming a leading export crop alongside coffee. This confidence led traders to continue paying farmers high prices in 1993, despite evidence that Sudan was returning to the market. The 1993 Sudanese crop turned out to be a record crop, reducing international prices and driving down the export prices for the less favored Ugandan commodity by one half. This, together with the appreciation of the Ugandan shilling, resulted in substantial losses for sesame traders, with many going out of business.

3.18 In the case of maize and beans, cross-border trade had gone on for many years, with actual product flows depending upon supply and demand conditions and relative exchange rates in particular years. While the number of refugees in East Africa increased sharply during the late 1980s and early 1990s, international relief agencies did not procure staple foods in Uganda because of its then overvalued exchange rate (increasing the costs of supplies) and the difficulties encountered in securing reliable supplies. The initial upheaval in Rwanda weakened the maize and beans trade as many Ugandan traders were not paid by their Rwandan counterparts. In 1993, new opportunities emerged. Kenya experienced a major drought, leading it to import some 5.8 million bags of maize. Large quantities of maize were supplied from Uganda, through formal and especially informal channels with Kenyans participating in this trade on both sides of the border. 1993 also witnessed a large increase in the food requirements of international relief agencies to service Rwandan refugees. In 1993, the World Food Programme alone purchased 100,000 tons of commodities in Uganda, the bulk of which was maize and beans. Much of Uganda's officially recorded exports of maize and beans was based on the purchases and supply systems of the relief agencies.

3.19 The Ugandan deliveries to the relief agencies were not based on well organized supply channels. Many individuals simply tendered bids for supply contracts and upon approval, went out to procure the necessary crop. Some traders did not understand the tendering process, making low bids with the assumption that they could bargain the price upward after a tender was accepted. With the appreciation of the Ugandan shilling, many successful bidders were forced to choose between defaulting on their contracts or incurring large losses. Many bankruptcies occurred. As a result, the membership of the

Uganda Grain Exporters Association dwindled from 25 in 1993 to only 6 by mid-1994. The survivors have been larger firms, with more secure financing, a diversified product line, and a better crop procurement network.

3.20 Uganda has experienced several, smaller short-term booms in NTAE which proved not to be sustainable. For example, a spurt of exports of fresh pineapples in 1988 and 1989 was rendered unprofitable by a rise in air-freight rates. The emergence of a trade in fresh and dried ginger was sidetracked by the Gulf War and by the financial and technical problems experienced by the major exporter association. Various attempts to develop an export trade in dried chilies have shown initial promise, only to sputter during implementation. Among higher-value products, there has been an extended gestation period for getting production and post-harvest operations at a level which would enable the penetration of international markets. Small quantities have been exported and a sizable breakthrough is close for several commodities. Much of the past activity has consisted of 'learning by doing' and tapping into donor financial and technical assistance. A lack of cooperation between new entrants into various commodity fields has prolonged the learning process.

INVESTMENT, ORGANIZATION AND INSTITUTIONAL SUPPORT

3.21 **Investment in NTAE.** The sustainability of Uganda's NTAE and the future competitiveness of the different subsectors in the international commercial environment will depend, to a considerable degree, on the level and effectiveness of investment in land, plant and equipment, human capital, and technology. Through 1991, actual investment in nontraditional agricultural production, processing, and trade was very small, with little private investment in commodity cleaning and storage facilities, minimal investment in food processing, and with most of the emergent fish processing companies and most spice/silk/horticultural companies operating with very rudimentary facilities. In the last three years, however, there has been considerable investment in new facilities and in the upgrading of prior establishments.

3.22 Based on information available from the Uganda Investment Authority, supplemented by information obtained from a few firms not registered by UIA, it is estimated that between July 1991 and July 1994, US$30.4 million was invested in land, buildings and equipment for NTAE production, processing and trade. This should be regarded as a minimum figure as it primarily captures investments by UIA-registered firms and does not include many small-scale investments, particularly in artisanal fishing and in on-farm investments in post-harvest facilities. During the past three years, there has also been investment in traditional agribusiness industries, especially in sugar production and processing.

3.23 As Table 3.2 indicates, the largest amount of recent NTAE investment has occurred for fish processing. Thirteen such investments have taken place (involving nearly US$14 million), either for the construction of new, modern factories or for the upgrading of existing facilities to meet EU standards. Most of this new investmenthas been undertaken by foreign or joint venture companies. A majority of the operating fish processors have some Kenyan (Asian) participation, this being stimulated by the political uncertainty there and by Kenya's comparatively poorer access to the Lake Victoria fishery resources. While previously the fish processing industry absorbed considerably less than its allocated quota of 60,000 tons per year, investments made in the past two years are likely to increase the processing capacity of the industry to over 100,000 tons per year, a figure just below the total fish landings from Lake Victoria for all consumption and market purposes in recent years. Until a better understanding of the present state and future sustainability of the Lake Victoria fisheries resource base is acquired, further investments in fish processing in the lakeshore and Kampala areas (but not necessarily on other lakes) should be discouraged, except for investments geared toward modernizing existing facilities to meet EU standards.

Table 3.2: AGRIBUSINESS INVESTMENTS IN UGANDA
July 1991 to July 1994

	Number of Projects	Value of Investment	Share of NTAE Investment (percent)
Nontraditional Agribusiness	*63*	*30.44*	*100.0*
Fish processing	13	13.96	45.9
Flowers/horticulture	7	3.87	12.7
Edible oil processing	10	3.44	11.3
Poultry production/feeds	3	2.34	7.7
Hides, skins, leather	3	2.19	7.2
Produce trading	5	1.34	4.4
Grain milling/processing	6	1.14	3.7
Fruit/vegetable processing	2	0.79	2.6
Dairying/abattoir	7	0.55	1.8
Vanilla/silk/pyrethrum	4	0.54	1.8
Sawmilling	3	0.28	0.9
Traditional Agribusiness	*11*	*45.84*	
Sugar processing	2	43.69	
Coffee processing	5	1.51	
Tea production	4	0.64	
Total All Agribusiness	***74***	***76.28***	

Source: Uganda Investment Authority, supplemented with data from selected nonregistered companies.

3.24 Investments in cut flower and other horticultural ventures have ranked second in aggregate value. Seven such ventures are already in some stage of implementation, while several others have reached advanced planning stages. As in the case of fish processing, investment in horticulture has exhibited something of a 'herd' pattern, with a few initial investments having a demonstration effect, leading others to replicate. Both Ugandan and foreign capital have been invested, with most individual ventures being undertaken by corporate groups which have multiple business interests in Uganda. Such corporate structures have facilitated their access to term financing and have helped to bear the costs and risks of such start-up ventures. The emergent horticultural export industry has thus far relied heavily on expatriate management services and on contractual links tying together technical advice and marketing services. Thus far, Uganda has piggybacked on the Kenyan cut flower industry, utilizing varieties of roses which have been grown

successfully in Kenya, and recruiting Kenyan flower farm supervisors to become farm managers in Uganda.

3.25 A number of small-to-medium-scale investments have been undertaken in the areas of grain milling, edible oil extraction, dairy production and processing, and poultry production. These ventures are geared toward the domestic market and, as such, are not examined here. At least among officially registered companies, there has been only modest investment thus far in produce marketing infrastructure, including warehouses, vehicles, produce cleaning machines, etc. There exist many unused facilities of the Produce Marketing Board. Those in good condition should be leased or sold to the private sector.

3.26 Some limited investment has been directed toward high-value specialty products, including vanilla, silk, and pyrethrum. Both for vanilla and silk, emergent entrepreneurs and farmers have been provided technical and/or financial support from donor-supported programs. Probably the most significant assistance has come through the USAID-funded Agricultural Nontraditional Export Promotion Project (ANEPP) under which several entrepreneurs were provided with technical and matchmaking services as well as grants for business plan development, management services, etc. Under the project, extension support was provided to vanilla growers and a program of research station and field trials for a range of fruit, vegetables and cut flowers was initiated. In the case of pyrethrum, an international consulting company has made their first African agribusiness venture. The original idea was to organize pyrethrum production in western Uganda and have the flowers processed in Rwanda under contract. However, with the disarray in Rwanda, the company is now investing in a pyrethrum processing facility which should come on line in 1995.

3.27 The organization of the different NTAE subsectors is quite varied. Given the country's agrarian structure, it is not surprising that primary production is dominated by smallholder farmers. This applies to low-value as well as high-value commodities. The main exception is cut flower production where multihectare operations under shaded netting is the emerging trend, although there is some interest in exploring possibilities for outdoor, lower cost flower production. Fish catches are by artisanal fishing crews with only one trawler licensed to catch fish on a large scale.

3.28 In most NTAE subsectors the 'vertical' linkages between primary producers and downstream processors and traders have yet to fully develop, resulting in inefficiencies in the supply chain and uncertainty. Among the high-value and specialty crops, various forms of contract farming are beginning to emerge, filling, in part, a vacuum created by relatively weak systems of rural finance, agricultural extension and material input supply in many locations. These contracting systems, however, are not yet as advanced as those in place for tea (involving 10,300 growers) or tobacco (23,000 growers). Weak intermediation between farmers and the contracting firms has been common. Attempts to use cooperatives as intermediary institutions have frequently been unsuccessful due to poor management and conflicts of interest (i.e. for vanilla, chilies, ginger and tobacco).

At present, the most effective contracting scheme among NTAE is that for pyrethrum. This involves some 3,500 farmers in the Kabale area, organized around collection centers, with the lead company providing a team of extension agents. This firm maintains a long waiting list of farmers wanting to join the scheme.

3.29 In the fish industry, there are some cases of fishermen being financed (for equipment) by processing companies, although this is not widespread. More common are repeat trading arrangements in which fishermen give particular companies the right of first refusal for each consignment. Generally, however, the bulk of the fish procured by the processing companies is auctioned off on the beaches. The vertical linkages in the maize, beans, and sesame trades are even weaker with little or no direct contact between formal sector exporters and the primary producers. Physical and cash insecurity contribute to this, but so do the poor condition of feeder roads, the weak liquidity of many produce traders, and other factors. Purchases are made on a cash basis, and virtually no support is provided by traders to farmers in terms of technical advice and input procurement. As competition and quality standards increase, this is likely to change and will expand the outgrower scheme once its processing factory comes on line.

3.30 It is important to highlight several other dimensions of NTAE commodity system organization in order to understand the current state and likely future evolution of NTAE in Uganda. These are as follows:

- The maize and beans export trade has a dualistic structure, comprising: (i) a small number of Kampala-based companies who are financed from off-shore sources, have warehouses and produce cleaning and packaging equipment, and trade in an array of exportable and imported commodities; and (ii) large numbers of part-time, small-scale traders operating in small towns or rural areas, typically without proper produce storage and cleaning facilities. These two groups do not and largely cannot compete with one another. The Kampala-based firms channel most maize and beans sales through the relief agencies and cannot compete on a price basis with the smaller traders whose sales are largely informal and cross-border. Most of the smaller traders are no longer eligible for relief agency tenders or are discouraged by a system of bid-bonding, whereby their tender bids are accompanied by a 5-10 percent deposit which is forfeited should they be unable to fulfill successful tenders.

- In both the vanilla and silk industries there are two rival groups which have not cooperated with one another, experimenting with different approaches to production and seeking different sources of technical and other support. In the case of vanilla this rivalry has proven to be dysfunctional for the industry as farmers are receiving different and inconsistent technical messages, the prices paid to farmers have been bid up to a level which is not sustainable, and the scramble for available supplies has led to the harvesting and sale of immature beans.

- In several commodity fields production and/or trade associations have been established. Most have not yet provided much practical support to their members or developed into cohesive entities. Their future development is critical, however, as there are many services which the public sector cannot be expected to provide and will be beyond the means of individual firms.

- Until now, Ugandan-based NTAE firms have had little or no involvement in the international marketing of their commodities and products. Uganda's cut flowers are sold to brokers who put them on the Dutch auctions. Brokers also handle the bulk of Uganda's fish exports. Uganda's cocoons are sold to the same firm which supplies silkworm eggs. Other high-value NTAE are similarly contracted with single overseas companies. As product quality improves, the Ugandan firms will need to develop marketing strategies to penetrate new markets and distribution channels.

3.31 Institutional support to NTAE has been limited and not especially effective. Although the recent restructuring of government ministries and agencies has removed the most obvious anomalies, there is still a need for further rationalization of activities of the Ministry of Agriculture, Animal Industries and Fisheries (MAAIF), the Ministry of Industry and Trade, the Ministry of Finance and Economic Planning and the Agricultural Secretariat of the Bank of Uganda, the latter being responsible for policy analysis and formulation. MAAIF is perceived by the private sector as being weak. In some cases (i.e. vanilla, pyrethrum, silk), the Ministry has been ambivalent if not antagonistic to the private promotion of smallholder production. Much of the analytical attention and direct support to NTAE has thus occurred outside of MAAIF. Donor-funded initiatives, as with ANEPP and several EU-funded activities have sought to address some of the existing technical, financial and marketing difficulties, but on a selective and largely *ad hoc* basis. In 1995, several years since the initial takeoff of NTAE, Uganda still lacked a private or public institution which provided effective support services to producers, traders, and/or processors on a self-sustaining basis.

Efficiency, Competitiveness and Development Impact

3.32 Most NTAE subsectors are still in an initial stage of development and it is too early to make firm judgments about their long-term competitiveness and developmental impact. Uganda's recent success in agricultural export diversification must be regarded as fragile since in general its NTAE have been characterized by low or uneven product quality, low rates of production and post-harvest productivity, relatively wide gross marketing margins, and high rates of failure among individual firms.

3.33 Uganda has thus far not developed a reputation for high quality products. Both maize and beans from Uganda are considered to be of poor quality in Kenya. Uganda's hides and skins are considered to be poor quality as they are dried on the ground and frequently get imbedded with sand and dirt. Much of the fish reaching Uganda's fish factories is of mediocre quality, enabling the processing of only a second or third grade

product. This is reflected in the prices obtained in Europe which are no better than domestically produced frozen cod fillets. A large proportion of Uganda's silk production is of non-exportable second grade, while its exports presently obtain prices well below those of the established suppliers. Uganda's sesame seed is not a high-value confectionery product and is an inferior substitute to Sudan's product. Initial supplies of Ugandan roses to the Dutch auctions received prices in the lower half of their price range for particular varieties. On the other hand, the quality of Ugandan vanilla is considered to be very high, and commercial tests have shown the country's pyrethrum to have a high pyrethrum content.

3.34 Productivity levels in most, if not all, NTAE subsectors are presently quite low. The recent increases in maize, beans, and sesame production have been due to area expansion rather than productivity gains, with yields lagging behind other African countries with less favorable agro-ecological conditions. Labor shortages, the widespread practice of inter-cropping, and the very limited uptake of improved varieties are contributing factors. Post-harvest losses for these crops are also high in Uganda. Smallholder vanilla bean yields are also well below achievable levels. The silk industry presently achieves very low germination rates for silkworm eggs (i.e. 50 to 60 percent) due to an absence of proper egg treatment and storage facilities. High rates of fish spoilage and contamination occur due to the absence of refrigeration facilities and the poor landing facilities on shore. Rates of spoilage are reportedly high in the fresh fruit and vegetable export trade.

3.35 **The Share of Primary Producers.** Uganda's NTAE subsectors currently feature high marketing margins between the farmgate or fish landing site and the point of export. As can be seen from Table 3.3, the share of farmers and fishermen in the final f.o.b. value is equivalent to or less than that provided to Uganda's coffee, tobacco, and cotton producers despite the fact that many of the nontraditional exports undergo less processing or preparation work after harvest and prior to export. Though requiring further analysis, the contributing factors to such high gross marketing margins are likely to include very high transport costs (especially for lower value commodities) due to high fuel prices, the high spoilage rates for perishables, the payment of official and unofficial fees at the district level and at borders, and high overhead costs due to the underutilization of facilities (i.e. fish processing factories, vanilla curing facilities and grain storage facilities). For some crops, another factor is the limited competition among farmgate buyers due, in part, to the poor condition of feeder roads.

3.36 Based on an analysis of the price/cost chains for different commodities, it is estimated that the total gross earnings accruing to farmers and fishermen of NTAE were equivalent to US$31.4 million in 1993 (Table 3.3). The greatest proportion of these earnings went to producers of maize and other cereals (US$15.5 million), beans (US$9 million), fish (US$2.2 million) and sesame (US$1.8 million). For all the other NTAE combined, farmer gross revenues were about US$3 million. Such earnings are not insignificant, especially when considering the returns to producers of long-standing export crops. For example, in 1993 the estimated payments to farmers for tea, cotton, and

Table 3.3: ESTIMATED REVENUE SHARE AND GROSS EARNINGS OF FARMERS AND FISHERMEN, 1993

	Estimated Share of FOB Value Accrued to Farmers/Fishermen (Percent)	Estimated Gross Earnings of Farmers/Fishermen (US$ m)
Nontraditional Exports		*31.35*
Maize and other cereals	40	15.47
Beans	60	9.05
Fish	25	2.24
Sesame	65	1.79
Hides/skins	10	0.60
Groundnuts/soybeans	65	0.55
Spices	55	0.47
Cocoa beans	63	0.45
Fruits/vegetables	50	0.33
Timber	50	0.25
Roses	75	0.15
Traditional Exports		*62.40*
Coffee	50	53.35
Tobacco	61	4.29
Tea	30	3.34
Cotton	62	1.42

Source: Based on data provided by the Agricultural Secretariat, Bank of Uganda, and interviews of traders and processors.

tobacco were only US$9.1 million in aggregate. Reflecting low international prices in 1993, Uganda's coffee producers received payments amounting to US$53.3 million.

3.37 Despite the deficiencies mentioned above, the available evidence suggests that many of the nontraditional export crops and products generate very favorable returns to farmers in comparison with traditional food and industrial crops, and that some NTAE have a higher international value added per hectare and a lower domestic resource cost ratio than major traditional crops. These comparisons are provided in Table 3.4 below. The first two columns compare private returns, i.e. farm-level output/input ratios and returns to family labor, while the last two columns compare domestic resource costs (DRC) and international value added (IVA). Farmer returns and national IVAs are especially high for high-value spices, horticultural crops, and industrial crops. The low-value NTAE (i.e. maize, beans, and sesame) have farmer returns and IVAs which are no better (or worse) than traditional food and export crops.

3.38 The limited available farm survey work indicates that nontraditional export crops provide a supplementary income to farmers, although in some cases—as with vanilla in the Mukono district, pyrethrum in the Kabale area, and among mulberry silk producers in

Table 3.4: RETURNS AND EFFICIENCY OF TRADITIONAL AND NONTRADITIONAL CROPS

	Farm-Level Output/Input Ratio	Returns to Family Labor (US$/man-day)	Domestic Resource Cost Ratio	International Value Added (US$/ha)
	March 1994	March 1994	June 1994	June 1994
Traditional Crops				
Coffee, unimproved	1.17	1.14	0.18	2,953
Coffee, improved	1.40	1.87	..	..
Tea	0.99	0.86	0.91	3,408
Flue-cured tobacco	1.21	1.51	0.68	1,356
Cotton, hoe	0.57	0.39	0.81	459
Cotton, ox-plow	1.11	1.10	0.69	961
Matooke (banana)	1.42	2.00	n.a.	n.a.
Nontraditional Crops				
Vanilla	6.62	7.74	0.55	9,574
Passion fruit	5.73	14.78	n.a.	n.a.
Silk	2.24	9.92	0.69	3,824
Pineapple	2.52	3.82	n.a.	n.a.
Ginger	1.37	2.09	0.68	1,420
Pyrethrum	1.30	1.32	0.77	n.a.
Chilies	1.27	1.25	0.27	1,471
Groundnuts	1.10	1.07	0.56	608
Maize, unimproved	1.10	1.03	0.38	661
Beans, unimproved	1.08	1.01	0.63	363
Sesame	1.04	0.93	0.86	196

Note: Domestic Resource Cost Ratio is the ratio of value added at domestic prices to that at world prices.
Source: Agricultural Secretariat, Bank of Uganda.

the Bushenyi district—these crops are emerging as a leading source of income. Survey work indicates that farmers are using this income for a variety of purposes including land purchase, home construction and repair, school and medical fees, consumer good purchases, and farm improvements.

3.39 Table 3.4 indicates that at the exchange rate of U Sh 940 per US$1 Uganda has a comparative advantage in the production and trade of many nontraditional crops and products as illustrated by domestic resource cost ratios well below unity. However, the hike in the international coffee price and consequent pressures on the Uganda shilling to appreciate further has raised concerns about the competitiveness and continued profitability of trade in many nontraditional and traditional export commodities. Analysis by the Agricultural Secretariat indicates that most of Uganda's NTAE remain economically profitable at an exchange rate of U Sh 900 per US$1, although in some cases just barely. At such an exchange rate, however, the profit margins for traders are

slim or nonexistent for many commodities and this puts downward pressure on the prices they are prepared to pay farmers and fishermen.

FUTURE PROSPECTS AND POLICY AGENDA

3.40 The prospects for future growth in Ugandan NTAE are good. For most commodities, demand will not be a constraining factor. Regional market demand for low-value staples will remain favorable given Kenya's emerging structural deficit in maize and beans and the continued need for food imports in neighboring countries as a result of political instability. Capturing a large and secure share of the Kenyan market will require an improvement in product quality and a reduction of costs at the farm level and in the marketing chain. As the Rwandan situation normalizes and relief agency activities decline and then altogether cease, Uganda should be able to maintain its level of maize and bean exports through growing formal and informal sales to Kenya, provided the latter will stick to the liberalization of its maize imports.

3.41 In the next few years, thanks to recent investments, rapid growth can be expected in Uganda's exports of fish products and cut flowers. The European and broader international market for cut flowers continues to expand and can easily absorb (at remunerative prices) the increased quantities of flowers expected from Uganda. Demand will not be a constraint for Ugandan silk cocoons and pyrethrum if high quality standards are achieved. The world vanilla market may soon be oversupplied, although Uganda can carve itself a niche at the upper quality end of the market. Studies by the Export Policy Analysis and Development Unit (EPADU) of the Ministry of Finance and Economic Planning suggest that there is a limited range of fresh fruits and vegetables for which Uganda can compete in the European and Middle Eastern markets. With an improvement in product quality, Uganda can achieve modest gains in its exports of sesame seeds, hides and skins, chilies and other spices and herbs.

3.42 Table 3.1 includes projections for Ugandan NTAE through 1998. These are based on information provided by the private sector for high-value industrial, horticultural, and other commodities and on assumptions about the development of the Kenyan market. The table shows that NTAE are projected to more than double between 1994 and 1998 to reach over US$166 million by the latter year. The largest increases in trade are expected from fish products, maize, beans and cut flowers, although expansion is also expected in the trade of pyrethrum, fresh fruits and vegetables, and several spices. Maize and beans trade involves uncertainty due to weather conditions both in Uganda and the neighboring countries as well as political developments in the region. This uncertainty means volatility in exports, which is difficult to predict, however. To realize the export and growth potential of NTAE, Ugandan producers, traders and processors must increase the quality of their products and increase farm-level productivity and marketing efficiency. To do so, apart from measures suggested in the previous chapter for reducing the antiexport bias, concerted effort is needed to address a number of infrastructural, technical, financial, and human resource constraints, as detailed below. Most of these constraints apply to other productive sectors as well.

3.43 **Physical Infrastructure**. Deficiencies in physical infrastructure increase risks and costs and contribute to problems of low product quality. While Uganda has a considerable road network, the majority of this network, *feeder roads*, are in very poor condition and serve as a major bottleneck in the movement of produce. At present few exporters use *rail services* because of their unreliability and cumbersome procedures, especially within Kenya. Uganda's *telephone services* are also unreliable and are extremely expensive. *Electricity services* are relatively inexpensive, yet are erratic, creating problems for processing operations and those requiring the refrigeration of raw materials and finished products. As the existing stock of infrastructure can increase only gradually, improving management of the available facilities is therefore important. There is a lack of proper *landing sites* along Lake Victoria creating conditions whereby fish can be contaminated by sand, dirt, and pathogenic bacteria. There is a virtual absence of *pre-cooling and cold chain facilities* for perishable commodities. While the existing *air cargo handling facilities* at Entebbe International Airport are antiquated and small, these will soon be expanded and upgraded through donor funding.

3.44 **Technology Development and Dissemination**. While measures are being taken to revive *agricultural research and extension*, this will be a long-term process. Traditional export industries, such as coffee, cotton and tea, developed their own research and advisory services over the years as have a private company for tobacco. Official research for most high-value and specialty NTAE has either been nonexistent or has been very rudimentary and dependent upon short-term donor financing. In the case of sesame, the varieties in use date to 1970 and have not been maintained by breeders. In some cases, individual private companies have done their own research and developed their own farmer advisory services. They have also distributed *planting materials*. Otherwise, a commercial seed industry has been slow to develop, with seeds for food crops either being saved from the prior year's crop or obtained from district agricultural officers. Relatively few farmers plant improved varieties of maize and beans, and high-quality sesame planting seed is virtually not available. Low educational attainment and the high illiteracy rate are a hindrance to dissemination of extension messages and adoption of improved technology. The Government should consider an outreach program to improve literacy in Uganda and hence enhance growth prospects in agriculture.

3.45 **Resource, Production, and Market Information**. There is considerable *uncertainty regarding the present state of the fisheries resource base, the catch potentials, and the long-term ecological and economic consequences of changes in this resource base*. There is need to conduct a fisheries subsector analysis, reviewing the available resource base, the existing domestic market and factory raw material requirements, issues related to fisheries policies, the water hyacinth problem, infrastructure investment requirements, etc. At present a study is being carried out on the resource base alone. Official *estimates of national and regional production* of maize and beans vary widely depending upon institutional source, generating problems for traders to make accurate investment and trading decisions. Great uncertainty also exists regarding *food crop demand*, complicating the marketing task of primary traders and farmers.

Exporters have had difficulty accessing information on overseas market opportunities, prices, and quality and other standards and regulations. Uganda's institutional capacity for *export promotion* is presently weak, while enterprise development suffers from unnecessary regulation and red tape. UIA could have a useful role in suggesting ways to streamline requirements for industrial and business development.

3.46 Based on prior experience in Uganda as well as in other countries, it is not obvious that the necessary export promotion functions can be best provided by a public organization. This may be particularly true for Uganda's major NTAE, including the regional trade in low-value food staples and international trade in high-value specialty commodities. Commodity or industry associations may be better placed to undertake the promotion work. The restructured Export Promotion Council should develop ways to collaborate with such associations in special country or commodity campaigns.

3.47 **Finance.** Most small traders lack *access to finance* to enable them to develop seasonal working inventories of crops and to invest. Commercial banks have little capacity and interest to provide *long-term capital*, especially to new enterprises and those engaged in relatively risky ventures. Only a small minority of nontraditional product exporters have obtained loans under the Bank of Uganda supported Export Refinance Scheme or Export Credit Guarantee Scheme due to the cumbersome procedures involved and the lack of strong incentives for commercial banks to lend through these schemes. A venture capital fund, managed by the DFCU, has provided long-term finance to several NTAE operations, although these have been primarily large-scale investments in fish processing and cut flower production. Ongoing assessments of the status of rural financial markets should consider the special requirements of NTAE farmers.

3.48 **Processing and Other Agribusiness Skills**. At present, very few of the managers or senior supervisory staff have training in modern food processing. This is especially important in the fish processing industry where there is a need to move rapidly to the Hazard Analysis and Critical Control Points method of production to meet EU standards. More generally, agribusiness management skills are not widely developed in Uganda. An effort to step up skills and on-the-job training is hence called for.

3.49 **Policy Analysis.** There is need to rationalize policy analysis, preferably in one place, with greater attention given to improving the database concerning NTAE trade and the costs, profitability and division of income from different commodities. Further analysis is needed on the constraints on regional trade and investment cooperation as this has significant potential for Uganda's export development.

3.50 **Land.** For foreign investment in NTAE, existing legislation which prohibits acquisition of agricultural land is a major bottleneck. The government committee which has been set up to review the draft Tenure and Control of Land Bill (1990) recommends that only citizens should be allowed to own rural land, whereas noncitizens could gain access to agricultural land through leasing arrangements. The Constitutional Assembly is currently discussing this (and other) recommendations. Foreign investors wishing to

obtain land in an urban area require the consent of the Minister of Land, Housing and Urban Development. In practice, these titles seem to be granted relatively easily.

3.51 **Donor Assistance.** The new IDEA project supported by USAID is obviously central to the medium-term development of certain NTAE. It is a complex project, whose success and sustainability will depend upon the caliber of staff involved, the linkages made with MAAIF research and extension pertaining to low-value (export) food crop technical support, and the extent to which commodity and industry associations can be strengthened to take on support (and regulatory) functions in their respective areas. It is important that attention be given under the project to enhancing product quality and marketing system development for the low-value staples, where the potential payoffs are likely to be more widespread than for some of the more exotic, high-value commodities. The businesses must be enabled to chart their own strategies and find their own solution to problems. In order to get the most benefit out of the project's matching grant funds and test the seriousness of prospective exporters, the beneficiaries should be asked to contribute at least 25 percent of the costs for feasibility studies, market tours, training programs, technical assistance, etc. Where grant funds are to be provided to "jump start" export activities, these should help defray certain fixed entry costs (developing markets contacts), yet not finance variable cost items (i.e., seeds, packaging materials). Otherwise, entrepreneurs will be unable to judge the actual (or even potential) profitability of the activity, weakening the scope for sustainability.

Box 3.2: Technical Assistance for Nontraditional Export Development

Additional support for nontraditional agricultural exports will be provided under a five-year, USAID-funded Investment in Developing Export Agriculture Project (IDEA). The project will address gaps in market and technical information, help to strengthen agribusiness management skills, and help Ugandan traders and processors develop links with foreign buyers (and potential investors) and strengthen their ties with local farmers. The project will feature an array of technical assistance mechanisms and provide direct support to exporters of both low- and high-value agricultural commodities/products. Under the project, entrepreneurs could benefit from customized technical assistance, participation in market tours, and grants to finance feasibility studies or otherwise "jump start" export activities. The project will also fund applied farm research work on selected commodities, strengthen local university training in post-harvest management, horticulture, and marketing, and strengthen market information/intelligence systems. An Agribusiness Development Center (ADC) will be created as a temporary, autonomous project implementation unit. The ADC will be staffed with five expatriate and five local professionals.

4
INFRASTRUCTURE AND HUMAN RESOURCES FOR GROWTH AND POVERTY REDUCTION

4.1 Experiences from East and Southeast Asian countries highlight the vital role of rural infrastructure and basic literacy and numeracy for rural development and sustainable growth. This chapter analyzes first these cross-country experiences, and summarizes lessons for Uganda. Second, the chapter assesses the availability of human resources for growth by examining the current educational attainment and the health and nutritional status of the population as well as discusses government's role in the provision and financing of social services.

4.2 In addition, rural infrastructure development and education are necessary for reducing poverty, which, in Uganda, is wide-spread and predominantly rural. For this reason reduction in poverty has to be based on a strategy for broad-based, environmentally sustainable agricultural development. Extension services play a crucial role in intensification of farming. This chapter seeks to show that, in order to raise rural incomes, policies should go beyond agriculture and foster the development of off-farm enterprises, the improvement of local infrastructure, education and health services, and the strengthening of local government. In particular, investments in education and health, apart from their direct impact on the quality of life, are vital contributions to the process of productivity change, income growth, and specialization in the rural economy.

4.3 East and Southeast Asian countries—for example Indonesia, Malaysia, Thailand and China—have achieved rapid reductions in rural poverty in recent decades through a process of substantial economic growth. This growth has been based initially on labor-intensive agriculture combined with investment in human capital, which has increased labor productivity. Rising rural incomes boosted consumer demand and strengthened demand-supply linkages to rural nonfarm activities, such as agroprocessing, industries producing farm-related products, and basic consumer goods and services. Rural-urban migration also had a (relatively small) role in poverty reduction. Agricultural incomes and hence consumer demand were initially boosted by green revolution technology which smallholders were able to adopt. Provision of rural infrastructure also had a significant role.

4.4 Currently, earnings from off-farm employment and non-farm enterprises contribute a relatively modest share to the income of rural dwellers rising from 12 percent among the rural poor, to 27 percent of total earnings of the better-off. While the development of off-farm enterprises is likely to be demand-constrained, these businesses can provide a significant multiplier effect to improvements in agricultural earnings. Estimates of the multiplier effects of agricultural growth on economic activities in the

surrounding areas range from around 1.5 in Africa to around 1.8 in India and Malaysia.[22] Off-farm activities received a boost in Uganda during the years of the "economic war" under the Amin regime, and during the early 1980's, when severe shortages of foreign exchange, and the paralysis affecting the large import substitution industries producing tools, household goods, furniture, and other items caused production to increase in businesses at regional and district centers.

RURAL INFRASTRUCTURE FOR GROWTH AND POVERTY REDUCTION

4.5 The provision of rural infrastructure has had a significant positive impact in many emerging Asian economies on growth and poverty reduction through increases in agricultural output, productivity, and development of off-farm activities in rural areas.[23] Market-determined incentives for agriculture and nonfarm activities are found to be necessary to induce a supply response but they are not sufficient to maximize the response. To do so, governments also need to intervene where markets fail, particularly in the areas of infrastructure. Similarly, infrastructure alone cannot induce economic growth but its absence is likely to constrain it. Empirical evidence also shows that agroclimatic potential and natural resource endowments influence both the level of infrastructure investment and the development response to additional infrastructure. In the areas of low potential, or where policy environment has not been favorable to private economic activity, the supply response to investment in infrastructure has been minimal. These are important lessons for Uganda's policy of liberalizing agricultural markets and for its strategy of rural infrastructure investment aimed at growth and poverty reduction. Recent changes in agricultural markets have to be continued, including restructuring of some of the processing industries and reduction in regulation of business development, supported by increased investment in rural infrastructure.

4.6 Studies of rural India, for example, show that a substantial part of the variation in availability of infrastructure is attributable to differences in agroclimatic potential.[24] Nevertheless, road density was also a significant independent variable in explaining variation in aggregate agricultural output, and greater than the effect of price changes. Furthermore, commercial banks were shown to locate in areas with good agroclimatic potential and good infrastructure. Access to banking facilities had a positive impact on a number of things. Another study concludes that credit availability was associated with a modest increase in agricultural output and rural wages; with a large increase in the demand for fertilizer and in nonagricultural employment; an increase in the use of draft power (animal and mechanic); but a modest reduction in agricultural employment.[25] Most importantly, credit availability had a strong positive impact on more profitable off-farm activities and employment.

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22 Haggblade and Hazell (1989).

23 Goldstein, E. (1993).

24 Binswanger (1992) and Binswanger *et al* (1993).

25 Binswanger and Khandher (1992).

4.7 Experience from East and Southeast Asia also suggests that a coordinated package of rural infrastructure—roads, telecommunications, electrification, water supply and banking facilities—is vital if agricultural growth is to succeed in stimulating rural nonfarm activities such as agroprocessing, commercial enterprises to produce farm inputs, and basic consumer goods and services. China has probably been the most successful in implementing the strategy of providing a full package of rural infrastructure. This was possible through an unusual degree of administrative and fiscal decentralization, which empowered local government to take control of the provision and financing of the infrastructure. Taiwan (China) grew fast thanks to Japanese investment which produced a strong agricultural sector, extensive transport infrastructure, and a base of literacy.[26] Integrated rural development projects of the 1980s often failed to address the fiscal incapacity of local governments which diminished their potentially useful role, while central governments resisted delegation of control and financial resources to local levels, including independent resource generation. The ongoing decentralization in Uganda has so far assigned many of the maintenance functions to local authorities but the investment program is still in the central control. Similarly, the issue of decentralization of taxation authority, which seems to be an important element in successful provision of rural infrastructure elsewhere, has not yet been addressed.

4.8 The poor derive indirect benefits from rural infrastructure to the extent it stimulates economic activity and increases the demand for local labor. To improve their direct access requires either reducing the cost of infrastructure (appropriate standards, low-cost and labor-intensive technology), or reducing the cost of using the infrastructure (low-cost transport services, for example). As elsewhere in Africa, Asia, and even in many cases in Latin America, the poor in Uganda tend to reside in areas of low agricultural potential, are largely illiterate, and lack basic infrastructure and social services. For the hard-core poor, access to social services and development of human capital are shown to be of the highest priority. Social sector investments tend to have a greater impact on income in the poorest regions than infrastructure investments, while the reverse is true in the better-off areas. However, a study of Bangladesh shows that infrastructure has a profound effect on the incomes of the poor.[27] Although in Uganda, where poverty is extremely wide-spread, efficient, broad-based economic growth is the best means of lifting a large number of people from poverty, there are (and should be) targeted subsidies to poor areas, such as the Northern Reconstruction Project supported by IDA and other donors, to ensure provision of a minimum infrastructure for those who are likely to be left behind in the growth process.

4.9 **Rural Roads**. Perhaps the most critical of all rural production-related infrastructure is the rural road network. Rural roads are typically public goods best provided by the Government but their construction and maintenance can be contracted out to the private sector. It is important that local people have a voice in making road

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26 Brautigam (1994).

27 Ahmed, R. and M. Hossain (1990).

investment decisions. In Asia decentralization of road investments and maintenance has resulted in increased utilization of local resources, better supervision of construction work, and improved maintenance. Apart from bicycles, rural Ugandans do not own many means of transport. Particularly, women walk vast distances when performing their household duties or marketing their produce. Assessing the transport needs of the poor can only happen at the local level which requires decentralized planning and implementation and willingness to consider paths, trails and tracks as legitimate infrastructure investment. Credit facilities for transport investments tend to be even more limited than those available for agricultural production.

4.10 The problem with rural roads is that they tend to be either over- or under-designed. The former is often the case when high standards and capital-intensive methods are used in construction, while the latter is the case when they primarily perform as public works programs for short-term employment generation. Again, these lessons are useful for Uganda where responsibilities for the maintenance of rural roads are being decentralized and the involvement of local contractors in construction will increase.

4.11 Rural feeder roads in Uganda cover about 20,000 km, and consist mainly of earth or gravel roads. While they are often at least indirectly linked to the main road network, their use is very much location- and user-specific. Maintenance continues to be the main problem of this network, which in the future, could be alleviated by the ongoing administrative and fiscal decentralization. The central government's strategy proposes that 14,000 km will be brought to a fair level of accessibility by 1996. There is , however, no clear assessment what the appropriate size of the network should be but clearly its present condition is far from being satisfactory.

4.12 **Other Infrastructure.** One of the main findings of the studies of East and Southeast Asia is that areas with development potential need the full "package" of roads, electrification, telecommunications, financial services and water supply to get the full benefit of infrastructure investment. Furthermore, rural electrification has been found to have little impact on agriculture, but had a significant impact on the development of agroprocessing industries and farm services. Rural electrification does not, on its own, induce the development of rural enterprises, but the more developed an area is, the greater the impact of rural electrification is likely to be.

4.13 **Rural Finance**. The absence of a viable rural financial market is another constraint to the development of the rural economy. As shown above, availability of rural infrastructure attracts financial infrastructure. In Uganda, the financial sector is currently undergoing a major restructuring including privatization of the largest bank, Uganda Commercial Bank (UCB). This may lead to the closure of a large number of rural branches. Recognizing the importance of financial services to rural development, the Government has decided to carry out a study on the rural finance requirements immediately when the status of the branch network following privatization is known. The objective of the study is to determine a minimum set of locations where financial services should be available; institutional arrangements appropriate in providing these services;

and whether a subsidy or an incentive scheme would be necessary to ensure that the minimum coverage of service will be available.

EDUCATIONAL ATTAINMENT AND HEALTH

4.14 **Education**. Educational attainment by the population over 16 years of age is a crucial factor in determining a nation's medium-term growth path. In East Asia and elsewhere recent studies have shown that universal primary education has been a significant factor contributing to high growth rates and substantial reduction in poverty. Evidence on the importance of education in determining economic well-being varies somewhat between countries in Sub-Saharan Africa. In Uganda, recent studies find strong benefits of education for household welfare in urban and rural areas in all regions of the country. However, in Uganda no schooling at all (no level completed) was reported by 43 percent of those in the bottom expenditure quartile nationwide while over 18 percent of the population in the top expenditure quartile reported no schooling (Table 4.1).

4.15 In spite of the dismal picture of educational attainment in Uganda, there has been some progress, even during the period of economic decline. Enrollment figures have increased (see the Statistical Annex for gross enrollment rates).[28] Earlier enrollment figures available for Uganda were based on Ministry of Education surveys, which included only schools supported by the public sector. Figures from the 1992/93 Integrated Household Survey (IHS), which also include private schools, suggest much higher gross enrollment rates, including primary enrollment as high as 91 percent (99 percent for boys, 83 percent for girls). However, these figures include an unknown proportion of overage pupils and repeaters, and thus children's average attainment in primary education is likely to be much less than they suggest. The urban gross enrollment rate is 1.03 while the rural rate is 0.90. For the bottom expenditure quartile, the gross rate is 0.77, while that for the top quartile is 1.07.

4.16 Drop-out rates are high and evidence from the 1992/93 IHS shows that they have increased over time. Of the primary cohort enrolled in 1986, 70 percent dropped out by P7 (females 75 percent males 64 percent). In 1975 only 10 percent dropped out by P7. Of the 1986 entering class who reached P7 and sat the Primary Leaving Examinations, only 40 percent achieved admission to secondary school. For the top expenditure quartile, the gross enrollment rate for the secondary level is 24 percent while for the bottom quartile it is only 6 percent (Table X.8 in the Statistical Annex). In 1986 only 16 percent of students entering secondary school dropped out. By 1991, 47 percent were dropping out in the same period of time. In short, more children may be entering school than before, but a higher proportion are dropping out.

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[28] In many countries *net enrollment*, which counts only children within the target age group as enrolled, is preferred. The proportion of children between 7 and 13 years of age in school in Uganda is 70 percent nationally, while urban net enrollment is 78 percent and rural 69 percent. Net enrollment for girls is 67 percent and that for boys is 73 percent.

4.17 Enrollment varies very strongly across geographical regions. For instance, Karamojong has very low enrollment (12 percent for females and 32 percent for males in Kotido). Children from poor families have lower enrollment rates than others. However, economic factors may not be the most important. In an analysis of the 1989/90 Household Budget Survey, it has been found that poverty was not significant in determining attendance once other variables including the educational attainment of the household head were included.[29]

4.18 There are very strong gender differences for enrollment in Uganda as in other African countries. Although most Ugandan children enter primary school, it is estimated that only 48 percent of boys and 29 percent of girls complete the primary cycle. There are a number of reasons for gender differences. First, parents have different aspirations for girls and boys. For instance, the Women's Needs Survey found that mothers value education for the daughters because it will make them better mothers rather than help them find employment. The employment most mentioned for girls was being a nurse, which was extremely unlucrative at the time. Secondly, there is some evidence in other East African countries that married daughters are less likely than married sons to remit cash income to their parents. While daughters do provide physical care and help for elderly parents, education may not be seen as so important for this. Both these reasons relate to parental demand and are hard for policy to address directly, but there are also supply-side factors militating against female education which could be addressed more easily. Girls who get pregnant in school, for example, are required to drop out and are not allowed to re-enroll at the same school after delivery.

4.19 The Education White Paper (1992) proposed that when fees were removed from primary education, attendance should become compulsory. However, compulsory school attendance for all children of the relevant age requires the cooperation and participation of parents and guardians. Even if coercive means were adopted it is unlikely that universal attendance would be achieved given the costs and the need for labor.

4.20 Differentials in education relate to quality as much as quantity. School facilities are run down mostly from poor construction and lack of maintenance. Between 1980 and 1990 there was a 114 percent increase in the number of primary school teachers and the number of government aided primary schools rose from 4,300 in 1980 to 8300 in 1992. The proportion of untrained teachers rose from 42 percent in 1982 to 49 percent in 1992. The majority of trained teachers are found in urban or peri-urban areas. Only 15 percent of textbooks and instructional materials are provided by the Government. Most of the available materials are outdated. The 1989 school census showed that 15 percent of schools had a library but most of these libraries did not have any books. A recent study of education in Kibale showed that nearly all the primary schools in the district do not have enough classrooms and that the state of the existing building is very poor. Many lessons take place outside under trees, especially at the lower primary level.

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[29] Kakande and Nalwadda (1993).

Table 4.1: EDUCATIONAL ATTAINMENT
Percentage of Population over 16 Years of Age

	No Level Completed	P1 to P4	P5 to P7	S1 to S4	S5 to S7	Further	Proportion Literate
16 to 25 years	19.4	25.8	37.8	14.4	1.5	1.0	73.7
26 to 35 years	27.8	21.1	31.2	12.6	1.3	6.0	67.1
36 to 45 years	36.7	23.4	24.4	9.7	0.4	5.4	57.6
46 to 55 years	52.4	21.5	15.4	7.3	0.2	3.2	42.3
Over 55 years	69.7	19.5	7.1	2.0	0.0	1.7	29.3
Male	20.6	25.6	33.1	14.7	1.5	4.6	74.7
Female	45.1	20.7	23.9	7.8	0.5	2.0	49.0
Urban	11.4	13.5	33.0	25.9	4.4	11.7	85.8
Rural	36.9	24.5	27.5	8.7	0.4	1.9	57.4
Expenditure quartiles:							
Bottom	43.1	24.2	24.9	6.3	0.5	1.0	50.2
Lower middle	34.7	22.4	29.0	10.9	0.6	2.4	60.1
Upper middle	26.9	21.9	31.5	14.8	1.2	3.7	68.5
Top	18.4	16.6	28.5	22.3	2.9	11.3	78.8

Note: Literacy means reading and writing.
Source: Calculations from the 1992/93 Integrated Household Survey.

4.21 **Literacy.** The ability to move into more remunerative off-farm employment, to adopt more productive but more risky and complex agricultural technology, or to make a successful transition to an urban livelihood is closely linked to literacy and to levels of education. In a review of the characteristics of the rural population across districts in Uganda, adult literacy correlates positively with low levels of poverty. On its own, adult literacy explains some 46 percent of the variation in the district poverty index. Accelerated growth in the next few years can only come from those who are now between 16 and 55 years of age but of whom a large number are illiterate and therefore unable effectively to receive extension messages, initiate local business development, and so on (Table 4.1). Although experiences from literacy programs have not been too positive in general and hence universal primary education is considered the first-best policy option, the Government should seriously consider outreach programs to attack illiteracy nationwide. This should be done without delay in order to equip Ugandans with basic literacy and numeracy skills to be better able to participate in and bring about the growth required for poverty reduction.

4.22 **Health.** Health indicators in Uganda are very poor. Uganda compared favorably to other Sub-Saharan African countries in the 1960s, but has since dropped in standing. While other countries progressed, Uganda stagnated. Although economic decline certainly played a major part in this decline some aspects of health can be improved at low cost and do not need to wait for further economic recovery. For example, other

countries have raised life expectancy even when incomes were low and not growing particularly fast.

4.23 Although there are data on morbidity, clinical data suffers from sample selection problems, and survey data are inaccurate (respondents' reporting of their health has a strongly subjective element). Recent mortality data also suffer from underreporting. This analysis therefore concentrates on two measures that are relatively robust: anthropometric indices of children and the mortality ratio of children of surviving mothers.

4.24 The 1991 Census estimates of life expectancy are based on the reported mortality of children of surviving mothers, with appropriate adjustments. They suggest that health indicators have improved little if at all since the 1960s (Table X.1 in the Statistical Annex). Nationally infant mortality is 122 per 1,000 births, while child mortality (under five years) is 203 per 1,000 births. The expenditure-based regional poverty profile is confirmed by child mortality data—Kampala, one of the wealthier regions, has the lowest child mortality rate, while Kitgum in the north has the highest rate. But Mbarara, which is relatively wealthy in terms of household expenditure, has a higher child mortality rate than the national average. As shown below, educational attainment may at least partly explain this finding.

4.25 The diseases that cause death are not clearly understood by surviving relatives who are often too sensitive when asked. However, data are available on the causes of death in clinics. These data suggest that malaria, diarrhea, and measles are the major killers of children. To analyze the pattern of child mortality, the proportion of children who have died but were born to surviving mothers is used. This indicator has some limitations; for example, it is likely to omit many cases of pediatric AIDS because mothers who pass AIDS to their children are likely to die themselves. Also the age of the child at death is not known. But, it has the advantage of allowing the analysis of mortality across the whole child population.

Table 4.2: CHILD MORTALITY
Ratio of Children Who have Died

	Mother's Age					
	< 20	21-25	26-30	31-35	36-40	> 40
Location:						
Rural	0.12	0.15	0.18	0.20	0.20	0.31
Urban	0.09	0.11	0.13	0.15	0.17	0.27
Expenditure quartiles:						
Bottom	0.13	0.17	0.17	0.19	0.19	0.33
Lower middle	0.15	0.13	0.16	0.19	0.20	0.32
Upper middle	0.07	0.17	0.19	0.20	0.19	0.30
Top	0.11	0.13	0.16	0.19	0.20	0.30
Maternal education:						
None	0.10	0.17	0.20	0.21	0.22	0.34
Some primary	0.11	0.15	0.16	0.20	0.18	0.25
Some secondary	0.04	0.08	0.11	0.09	0.14	0.11
Some further	0.00	0.03	0.07	0.05	0.08	0.09

Note: The above calculations use the proportion of children, who have since died, born to surviving mothers.
Source: Calculations from the 1992/93 IHS.

4.26 An important finding from the analysis of the 1992/93 Integrated Household Survey data is that mortality is drastically lower for children of educated mothers; it is somewhat lower, but not dramatically so, for the economically better off (Table 4.2). But, even the top expenditure quartile suffers from significant child mortality. There is also a big difference between urban and rural areas: children of urban mothers have a much better chance of survival.

4.27 A multivariate analysis confirms the overwhelming importance of women's education in reducing child mortality and shows that measures of mothers' beliefs about health are independently important.[30] In general, education may raise incomes and increase women's bargaining power within the household, but the evidence strongly suggests that its effects on mothers' understanding about health are most important. Other studies have revealed a number of beliefs that influence child health, including beliefs about children's feces, the practice of excising "false teeth," and the role of oral rehydration therapy. This body of work implies that in order to improve child health in Uganda, the level of public understanding about health must be raised. While education is an effective way of accomplishing this, less-costly methods can be used at the same time. China, for example, achieved a great deal by delivering a few very simple health messages to its population through the media and political institutions.

4.28 Although adult mortality is an extremely serious issue in Uganda, data are harder to obtain. There is no doubt that adult mortality is very high and likely to increase because of the high rates of HIV infection. A serious effort has been made to inform people about the AIDS epidemic, and data from the 1992/93 IHS show that almost everyone in Uganda has heard of the disease, although not everyone understood it completely. Other major adult killers include malaria and tuberculosis—both of these are on the increase and are more likely to be transmitted in crowded living conditions. Both can be treated quite effectively, but the poor are less able to have access to adequate treatment.

4.29 Caring for the ill imposes a large cost. Because much care is given within the household and because the productive value of women's time is often overlooked, it is easy to discount the large amount of resources already being absorbed by care for the sick. Most cost estimates assume that the sick require hospital treatment and arrive at frightening and unfeasible numbers. While the costs incurred in providing domestic care is not known, they are probably high in relation to total household income. Studies of health expenditure have revealed that transport is a major problem. One of the attractions of the traditional sector is the proximity of healers.[31]

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30 Mackinnon (1995).

31 Wamai (1993), a study of the determinants of patient compliance with tuberculosis regimes, find that transport costs were a crucial constraint for poor patients in Kampala.

4.30 **Nutrition.** Stunting (low height for age) and wasting (low weight for height) are the two most commonly used indicators of protein energy malnutrition among children. These markers mirror society's state of deprivation—they result from lack of food and exposure to illness. Recent evidence indicates that the effects of even moderate levels of protein energy malnutrition can be devastating. More than 56 percent of all deaths of children under five years are caused by effect of malnutrition on infectious diseases. In other words, childhood diseases such as measles, diarrhea, or acute respiratory infection are more fatal to those children who have moderate protein energy malnutrition compared with those who do not. The future well-being of malnourished children is likely to be severely compromised. Longitudinal studies indicate that children who were stunted in their preschool years are likely to perform poorly in primary schooling and are likely to earn much less when they join the labor force. Thus, the economic benefits from improving nutrition at an early age are substantial.

4.31 Uganda is characterized by relatively high rates of stunting, but low levels of wasting (Tables X.3, X.4, and X.5 in the Statistical Annex). In the lowest expenditure quartile 44 percent of children are stunted, while in the top quartile 37 percent suffer from stunting. The figures for wasting are 7.3 percent and 3.8 percent, respectively. The age distribution of malnutrition is very marked: after about six months children suffer wasting, and their height-for-age begins to suffer. After the age of two wasting is no longer a problem (indeed, for children older than four years, Uganda's level of wasting falls within international reference standards), but height-for-age remains low. In other words children experience nutritional deprivation during early childhood, and these episodes lead to permanently reduced stature.

4.32 Nutritional deprivation may come from food shortage in the household, inappropriate methods of food preparation for young children, or episodes of illness. The fact that older children are not likely to suffer from wasting (even in the drought year of 1992/93), suggests that diseases (which are most severe for newly weaned children) and poor food preparation may be more important than food shortages.[32] Low expenditures are important in determining wasting but not stunting.

4.33 Because stunting is more prevalent in Uganda and because disease is a major contributor to stunting, disease probably plays as important a role in mass child malnutrition as does access to food. Hence what is needed is an integrated strategy that addresses health and nutritional issues jointly.

4.34 Adult nutrition has not been as extensively studied as child nutrition. However, some recent work has found that children who are malnourished are much more likely to have mothers who are also malnourished than children who are adequately nourished. This suggests that nutritional and health problems in children reflect a more pervasive problem in the household.

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[32] Jitta and others; Mackinnon (1995).

PUBLIC AND PRIVATE SECTOR ROLES IN SOCIAL SECTOR PROVISION

4.35 **The Rationale for Public Involvement**. In addition to primary education, there are very good reasons for public involvement in the health sector. First, many preventive measures have the character of a public good. Some areas such as immunization and AIDS control are receiving attention in Uganda but others, such as malaria control need more attention. Second, treatment of communicable diseases (which are currently causing most of the deaths in the country) has positive externalities, because a person who is cured cannot transmit the illness to another. Moreover, partial treatment such as short courses of drugs has strong negative externalities. Resistance to anti-malaria drugs and antibiotics is emerging as a major health problem in Uganda. Third, the death of one family member can have catastrophic effects on surviving members. Uganda is of course unusual in the extent of adult mortality. Finally, the failure of insurance markets means that people cannot insure themselves against their possible needs for major medical expenditure.

4.36 The care of an AIDS patient can be very expensive. This argument is illuminated by the recent Health Expenditure Survey[33] which found that few households had savings available for health expenditures and that strategies involved the sale of subsistence crops, short-term borrowing, and the sale of cash crops. Sales depend on seasonality and a ready buyer; access to borrowing depends on friendship and reciprocity networks. Land sales were also found, particularly where education was low.

4.37 The arguments discussed above give a rationale for public subsidy and regulation but not necessarily for public provision. However, the ability of the public sector to regulate the quality of the private sector is very limited in Uganda. It would also be very difficult to ensure that subsidies to private health actually reached the patient. The authorities already face a considerable challenge in controlling quality and eliminating illegal charges within the public sector. Hence the most realistic way of improving the health services available to most Ugandans is the improvement of facilities within the public sector. This needs to be combined with improving the information available to patients in both sectors. In education, many of the same arguments apply. In particular, education is a very effective way of conferring an asset (human capital) on children which, unlike land, cannot be expropriated.

4.38 Another important public sector role is the enforcement of standards. In the health sector, there has been much public controversy about the presence of large amounts of expired drugs. Where advice is provided so much by people in shops (mostly not qualified pharmacists) it is in practice very difficult to regulate prescription practices. In addition it has been found that even in the public sector, pharmacists' practices leave much to be desired. In education, national examination bodies provide quality control. Nutrition and sanitation may also be subject to government regulation. In colonial times

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33 Barton and Bagenda (1993).

households were required to build latrines and there is evidence that this is still enforced in some areas.

4.39 **The Incidence of Public Expenditure.** The decline in health services during the period of political instability caused a movement into the private sector.[34] People are more likely to use the private than the public sector. Use of public facilities is more frequent among the poorer households than among others. This suggests that public facilities, rightly or wrongly, are perceived as inferior (another reason for the pattern may be that charges are lower but queues longer at public facilities and the better-off pay to save time). Survey data on the "informal" health sector are likely to be under-reported. Most communities do report having a traditional healer accessible, which suggests that demand for their services is considerable. In addition self-treatment is extensive, including the collection of herbs, the use of purchased drugs and even the domestic administration of injections.

4.40 A significant part of education is privately financed and managed. However, much publicly managed education has a considerable private component of both management and financing, as schools often charge fees greatly in excess of the statutory fees. Fees are used to supplement teachers' salaries and developmental activities. In 1991, for secondary schools, 74 percent of developmental expenditure and 56 percent of recurrent expenditure were provided by parents.

4.41 The fiscal data indicate a significant increase in the shares of spending going to health and education during structural adjustment (Table 4.3). It should also be noted that some important recurrent costs are included in the development budget because they are mainly donor-financed, including the Expanded Programme of Immunization and the Essential Drugs Programme. Nonetheless, government expenditure on education, for example, remains at about 2 percent of GDP, whereas 5 percent of GDP is more typical for Sub-Saharan African countries. Furthermore, public expenditure per student is skewed towards beneficiaries at the higher levels of the system.

4.42 However, much of this increase in recurrent expenditure has been devoted to paying increased salaries to teachers and health workers. These increases should help improve the quality of education and health services. The central government has limited capacity to monitor the spending actually occurring in health facilities. In the future, with much primary spending decentralized, the center's capacity to achieve further increases in the shares of spending on primary health and education will be dependent on the cooperation of the districts, or on the ability to control districts' decisions.

4.43 The expenditure-based definition of poverty is used to examine incidence of expenditure in two ways using the 1992/93 IHS data (Tables X.14-X.16 in the Statistical

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[34] Table X.14 in the Statistical Annex shows the use of health facilities in the last thirty days as reported in the 1992/93 IHS.

Table 4.3: RECURRENT EXPENDITURES

	1988/89	1989/90	1990/91	1991/92	1992/93
In Millions of U Sh:					
Ministry of Education	8,576	11,237	16,439	36,361	38,204
Ministry of Health	1,846	3,439	4,832	9,943	12,064
Mulago Hospital	583	1,057	1,548	3,028	4,341
Makerere	1,266	2,212	2,763	6,361	7,270
Percentage Shares:					
Ministry of Education	16.8	12.7	16.1	17.7	18.0
Ministry of Health	3.6	3.9	4.7	4.8	5.7
Mulago Hospital	1.1	1.2	1.5	1.5	2.1
Makerere	2.5	2.5	2.7	3.1	3.4

Note: The above data do not include the health and education departments within the Ministry of Local Government. Actual data for these departments are not readily available; however, from the budgeted estimates, approximately 1.5 percent for the earlier years to about 4.5 percent for the later years could be added.

Source: Uganda Computing Services.

Annex). First, the proportion of people in each expenditure quartile who are receiving the service is calculated. Second, the proportion of people receiving the services who are in each quartile is obtained. The first gives an intuitive sense of how likely poor people are to receive public services, while the second shows the distributional impact of subsidies to these services. In primary education, for example, children in the bottom expenditure quartile go disproportionately to the government-financed and/or managed schools, while both non-profit and commercially run primary schools have their pupils from better-off families. In health services, the poor make about as much use of public outpatient facilities as the nonpoor. Hence, subsidy to these services is received about as much by the poor as by the nonpoor. For subsidies in education, the story is similar. However, poor children have lower enrollment than others, while poor families have a higher proportion of children than others. These two effects balance out so that roughly the same proportion of people are in publicly-financed schools in all expenditure groups.

4.44 **Existing Policy Initiatives**. The Education White Paper (1992) rightly makes the following recommendations:

- Changing the structure of primary-junior secondary–senior secondary from 7-4-2 years to 8-3-2 years to allow for increased teaching of vocational subjects.

- The possibility of parents or guardians paying in kind (materials, labor or food), rather than cash.

- Adequate facilities for girls in post-primary institutions to allow for balanced enrollment–head or deputy head of all educational facilities to

be a woman, and there should be accelerated registration and training of female teachers, tutors, and lecturers.

- The Education Policy Review Commission recommended that Government should allocate at least 20 percent of recurrent budget to education. Local government should raise resources for education through taxation.

The paper also discusses the following points which need further review:

- Abolishing government charges for primary tuition at a rate of one level per year. This was recently discussed by the Constituent Assembly and rejected as an item in the constitution. The issue now being discussed is when to grant free primary education in terms of need, and whether district administrations and Government should provide bursaries to some of the most needy and deserving children.

- Schooling should be strongly oriented towards vocational preparation—it should be prevocational in upper primary and vocational at secondary level.

4.45 In health, the Three Year Health Plan Frame and the White Paper on Health Policy Update and Review outline a strategy, involving concentrating on the most cost-effective ("essential") interventions, increased government funding, and cost-sharing. The Ministry of Health has identified an "Essential Health Package for Uganda," including malaria control, maternal and child health, family planning, immunization services, and control of sexually transmitted infections. While these principles remain in place, decisions on cost-sharing have been decentralized. The executive control of district health committees are being increased and all the districts have been required to produce health plans. The central authorities have urged the prioritization of primary and preventive care. This has been a long-standing recommendation for both health and education but little has been achieved in the actual shifting of spending toward primary services. It is felt that the decentralization is increasing the transparency of the sector and will make abuses more difficult. However, public confidence in the health profession remains to be restored.

A Way Forward in Human Resource Development

4.46 As argued above the public sector has a crucial role to play in both health and education. The Government of Uganda recognizes this and is committed to increasing the resources available for health and education. Despite improvements, the volume of public resources provided to these sectors remains low and should continue to rise both in real terms and proportionately.

4.47 The AIDS epidemic increases drastically the need for palliative care and also poses an enormous challenge to preventive medicine and education. For this reason Uganda should aim at a higher share of health than the typical developing country. While the progress made so far is encouraging, a share of health in the recurrent budget of 8 percent is not sufficient for Uganda. The balance of public resources should move further in favor of the primary services. Tertiary medical care should be publicly supported only where the referral system is effective so that the majority of the population has access to it when needed. This is a major area of policy reform in Uganda.

4.48 There are a number of illnesses, such as malaria, AIDS and tuberculosis, where preventive measures are badly needed. Government and NGOs have begun to focus AIDS education on those in the "window of hope" aged between 5 and 15, a group with little AIDS. However, the distinction between preventive and curative care is less clear-cut than often thought: cure of a tuberculosis patient reduces the risk that they will infect someone else. Moreover, only a medical system which offers curative care will win the trust of patients. Once this trust exists, preventive care can be pursued by offering advice in the course of curative treatment. The real need is therefore to improve both preventive and curative primary care (for those diseases which are affordably treatable), often using the same institutions to do both.

4.49 Given the high rates of child mortality, discussion of health in developing countries has focused on programs of maternal and child health. In Uganda, there is a paramount need to improve adult health. This involves both the prevention and cure of disease and the better treatment of accidents and disability. Similarly, adult education requires much greater attention. Some preventive actions are cheap. For instance, the media and the local government structure could be used to spread messages about health. Evidence from the 1992/93 IHS suggests that the Resistance Council network is so far little used for this.

4.50 Raising salaries is almost certainly a necessary condition for improved quality of social services. However, it is not a sufficient condition; many observers agree that the ethos of public service has been damaged by the prolonged period of economic decline and both ethical and professional standards will need to be restored.

4.51 In education, the main problem is the high number of drop-outs and repeaters, probably due to the low quality of education, rather than inadequate numbers of school places. The problem has become more serious over time. The paramount need is to improve the quality of teachers and the availability of books. In 1992 the Government launched a Primary Education Reform Program, supported by USAID and the World Bank, with these objectives in mind. (A mid-term review of the USAID supported aspects of the program is being carried out in 1995.) With a well-trained and well-monitored cadre of teachers and an adequate supply of textbooks other constraints such as physical facilities and curriculum would be far easier to address. There is a significant gap between male and female enrollment but not such a large difference in access to health care. In both sectors, however, much could be done to make the services more user-

friendly for women. Officials in health and education need to be alerted to the aspects of service provision which militate against full female participation.

4.52 All the above concerns can conceivably be helped by decentralization. However, this cannot be taken for granted, although local committees may be in a better position to enforce honest accounting and conscientious professional practice than an official in an under-resourced central ministry. However, many observers are concerned that the standards of district authorities vary, from very good to very poor, and that in some cases the districts may actually take less equitable decisions than central government. The central government should therefore clearly enunciate a set of minimum standards of service provision which the districts are expected to achieve, with some sanctions available for authorities who fail to achieve the standards.

4.53 User charges in both health and education are currently under discussion. In health, the White Paper advocated the introduction of user charges, but the current policy is to leave the decision to the districts. Despite a strong economic case for subsidizing health care and education in Uganda, public resources are extremely constrained. Hence for health, the decentralization of the decision about user charges to the local level is sensible, as user fees are likely to work effectively in improving services if they are controlled by the local level.

4.54 In education, it is worth considering targeting subsidy to deprived areas and to vulnerable children within the area. The Government is also planning to target P4-7 to reduce dropouts. This suggests that it sees education as a merit good rather than a vehicle for redistribution. Some schools are already spontaneously remitting fees from poor children but it is not thought to be an extensive practice. Also, experience in other countries suggests that the authorities should focus on providing textbooks and training teachers as high priorities. Communities are often more willing and able to pay for structures. Because of externalities, it is important to get the most able people into secondary and tertiary education and therefore to offer scholarships to this end. Older students should not be discriminated against.

4.55 Ensuring review of the quality of social services offered by the private sector is an important government responsibility. Quality control can be achieved in the education sector by a well-administered examination system. In health, the limited information available to patients provides a case for giving priority to importation of cheaper generic drugs. It is known that many doctors work in both sectors. Unfortunately, the effect of prohibiting this practice might well be to worsen the already serious brain drain. The most promising avenue for stopping the illicit diversion of resources seems to be the active involvement of the district health committees. The authorities are acknowledging the role that can be played by traditional healers and seeking to educate and integrate them into the health system.

ANNEX I
POVERTY UPDATE

POVERTY UPDATE

1. Poverty has various dimensions. At the personal level, people may be deprived of adequate nutrition, good health, or education. Socially, people may be denied human rights, citizenship, or access to social networks. Cultural values and beliefs may make some people disadvantaged, while a lack of political voice or physical insecurity impoverishes others. Economic factors, such as low incomes, few assets or little access to markets or public services, can force people into poverty. Poverty is also dynamic: households and people move in and out of poverty over time, even seasonally. Some people are more vulnerable to poverty than others; a single incident, such as a cattle raid in eastern Uganda, can start a downward spiral.

2. This annex examines the status of and changes in poverty in Uganda. It focuses mostly on poverty defined in economic terms. (Social indicators related to health, nutrition, education, and so on are discussed in chapter 4). The principal new source of data on poverty since the previous Country Economic Memorandum, *Growing Out of Poverty* (which is also a poverty assessment on Uganda) is the 1992/93 Integrated Household Survey, which will be used here. This information is supplemented by other primary data and secondary sources. Although important, issues such as variability and vulnerability cannot be adequately addressed within the scope of this report.

3. The main findings of this annex are:

- Poverty has not yet fallen substantially in Uganda, but hard-core poverty has been reduced.
- The poor are predominantly rural; the east and the north are the poorest regions.
- The poor grow proportionately the same amount of cash crops as the nonpoor and proportionately more coffee in the central region.
- Domestic terms of trade for cash crops have improved because of liberalization. This change has benefited the poor as well as the nonpoor.
- Emerging export demand for a number of food crops has led to a prompt supply response, similarly benefiting the poor as well as the nonpoor.
- Production of other food crops has stagnated in the absence of a major boost in demand and because of inefficient technology.
- The urban-rural gap has widened slightly.
- Women-headed households are not poorer than other households in terms of expenditure but are disadvantaged on several social indicators.

DISTRIBUTION OF WELFARE AND POVERTY

4. The measure of welfare used is the ratio of household expenditure per adult equivalent to the poverty line. The cut-off point separating the poor and the nonpoor is thus one (Box A.1 describes the derivation of the welfare measure). According to this measure, 61 percent of Ugandans are classified as poor (Table A.1). The median expenditure in each of the four quartiles is very close to the mean, except in the top quartile, in which the mean is driven upward by several very high observations. The highest expenditure in the ninety-ninth percentile is 4.6 times greater than the poverty line, while the highest expenditure in the seventy-fifth percentile is only 1.3 times that of the poverty line. The poorest 10 percent of the population consume barely more than one-third of the amount consumed by people at the poverty line.[1]

Table A.1: DISTRIBUTION OF WELFARE

Distribution percentiles	*Welfare measure (highest value in each percentile)*[a/]
99%	4.643
95%	2.510
90%	1.916
75%	1.289
61%	1.000
50%	0.850
25%	0.559
10%	0.381
5%	0.300
1%	0.193

Mean and median values of the welfare measure within quartiles

Quartile	Mean	Median
Q1	0.40	0.41
Q2	0.70	0.70
Q3	1.05	1.03
Q4	2.18	1.77

[a/] Welfare measure = household expenditure per adult equivalent/poverty line.
Source: Calculations from the 1992/93 IHS.

5. Choosing a poverty line is always somewhat arbitrary, especially in a country like Uganda where malnutrition is not primarily a result of food shortage at the household level. In addition, as available expenditure data are less than perfect, the relative picture is more reliable than the absolute one. Using expenditure quartiles allows us to see the relative picture and allows for more differentiation beyond poor and nonpoor. Because poverty is widespread, the characteristics of these two groups tend to be very similar as many people above the poverty line are only *slightly* better-off than those below it. The rest of the chapter will refer to the bottom quartile as the ultra poor and the two lowest quartiles as the poor.

[1] The average household size in the 1992/93 Integrated Household Survey is 4.8 people per household, which is 3.9 in terms of adult equivalent. This finding is in line with the 1991 population census.

Box A.1: Calculation of the Poverty Measure

The poverty measure used here is the ratio of total household expenditure per adult equivalent to a regional poverty line. The numerator and the denominator of this measure are defined as follows.

The Numerator. First, total expenditure is estimated for each household. This total includes the imputed value of home-produced food and owner-occupied dwellings. Then the size of the household is defined in adult-equivalents. Because children consume less than adults, they are given less weight in the adjusted measure of household size. The scale used is based on measures of nutritional requirements:[a]

Age	0-11 mths	1	2	3-4	5-6	7-9	10-11	12-13	14-15	16-17	18+
Weight	.27	.37	.45	.52	.62	.70	.73	.80	.88	.95	1.00

The Denominator. The poverty line is based on a food price index. First, the cost of 2,200 calories from a given food basket is calculated in each region for urban and rural households for a two-month period. This is the food poverty line. The basket is held constant across the country but regional price differences are taken into account. It may be possible to achieve the calorie level by substituting cheaper crops (as people do in the north), but it is assumed that such substitution is itself a symptom of poverty and that people would prefer the more expensive crops if they could afford them. This gives a food poverty line. Essential nonfood expenditures are then added, based on the consumption of nonfood items of the households whose total expenditures are equal to the food poverty line.

[a] Since children are particularly at risk, it may be argued that their weights should be higher than those used here. However, most of the results are probably not very sensitive to the choice of equivalence scales, the main exception being the relationship between demographic structure and poverty.

Source: Method adapted from Ravallion and Bidani (1994).

6. **The Rural-Urban Gap.** Rural households are poorer than urban households on average (Figure A.1). This finding holds even when rural expenditures are deflated by rural prices (which are lower than urban prices) and the equivalence scales used make a strong adjustment for children (rural households have more children than urban households). If these adjustments were not made, the urban-rural difference would be even more pronounced.[2] Twenty-seven percent of the rural and only about 11 percent of the urban population are in the lowest quartile, while 22 percent of the rural population and 49 percent of the urban population fall into the top quartile. The population is fairly evenly distributed among the four quartiles in rural areas, whereas in urban areas most of the population are in the two upper quartiles. (Gini coefficients are given in Table A.7).

7. The western and the central regions of Uganda are relatively better-off than the north and east, even though the west suffered a drought at the time the survey was carried out (Table A.2). The western region may have so far been less affected by AIDS than the central region, which may help to explain its relative affluence despite the drought.

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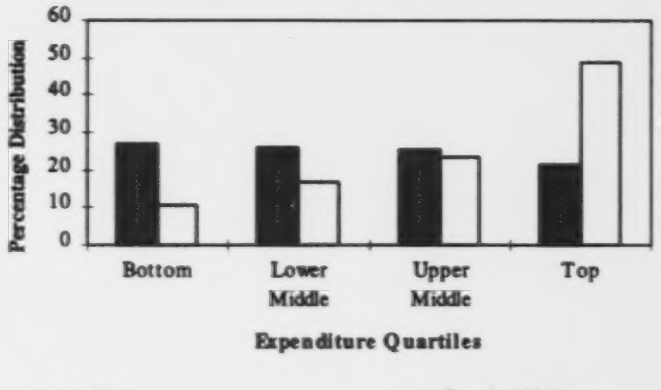
[2] However, the existence of the urban-rural gap in the labor market has been challenged by some authors recently (Jamal and Weeks 1993). While these data do not tell anything about the labor market, they do show that an urban-rural gap exists in terms of welfare.

Figure A.1: DISTRIBUTION OF RURAL/URBAN POPULATION BY EXPENDITURE QUARTILES



Source: IHS.

8. The north is very poor. This result is somewhat magnified by the choice of the poverty line, which is constructed using a national basket of goods so that a constant share of different goods in spending is assumed across different rural areas.[3] The crops most important in the north are relatively cheap, and thus one could argue that a given amount of spending buys more in terms of welfare. To some extent different crops simply reflect different climatic conditions. However, in Uganda some of the differences in crops consumed reflect relative prices and consumer incomes. An example is the widespread substitution of cassava for matooke in the central region in recent years.

9. A clear pattern also emerges in the distribution of poverty across districts (see the Statistical Annex). The relative affluence of Kampala (85 percent of the population falls into the two upper quartiles) and Mbarara (73 percent in the two upper quartiles) and the poverty of Karamojong, that is, the Kotido and Moroto districts (86 percent and 70 percent in the two bottom

Table A.2: DISTRIBUTION OF POPULATION BY REGION AND BY EXPENDITURE QUARTILES
In Percent

	Region Central	Eastern	Western	Northern
Expenditure Quartiles:	*100*	*100*	*100*	*100*
Bottom	17	29	18	39
Lower middle	22	27	23	29
Upper middle	27	25	28	18
Top	34	19	31	13

Source: Calculations from the 1992/93 Integrated Household Survey.

[3] Following Ravallion and Bidani (1994).

quartiles, respectively) stand out very clearly, as does the relative poverty of Kitgum (91 percent in the two lowest quartiles). Kitgum has been badly affected by civil unrest.

10. On average the poorest are households with older heads. This may partly explain why the heads of poorer households are typically less educated. Similarly better-off households tend to have heads whose parents were more educated. For example, among the most affluent quartile a third of household heads had literate mothers, while among the poorest the proportion was less than 10 percent. On average, poorer households are markedly larger, as measured by the number of adult equivalents. They also tend to have a higher proportion of dependents, both young children and other adults.

11. **Female-Headed Households.** Contrary to the earlier findings, female-headed households do not seem to be poorer in expenditure terms than other households in Uganda. Data from some other Sub-Saharan African countries show a similar result. One reason is remittances from a migrant husband. Households with more than one woman are, however, markedly poorer than others, a sign of the effects of polygamy. Again, there may be a third factor underlying this result, such as polygamy being more prevalent in poorer areas. While a more or less equal proportion of households in each expenditure quartile are female-headed, disaggregation by the marital status of the head of household reveals that households headed by widows are common in poorer quartiles. The opposite is true of other types of female-headed households, such as divorced women.

12. Although female-headed households as a group are not poor when assessed by consumption or income, they are disadvantaged on several social indicators, with lower school enrollment for girls, higher mortality and lower usage of curative health care. One consequence of these gender differentials is that female-headed households are markedly less educated than their male counterparts. More than half of the female heads had received no schooling compared to less than a quarter of their male counterparts.

SOURCES OF INCOME

13. The 1992/93 Integrated Household Survey (IHS) is the first nationally representative source to provide micro-level data on income in Uganda. As expected, agriculture accounts for most of the income of the poor and the nonpoor (Table A.3). In urban areas agriculture is also a significant source of income for those in the bottom quartile (Table A.4). Within rural areas, dependence on agriculture does not vary markedly with economic well-being. Instead, poorer people depend more on unearned income, while more affluent people have higher nonagricultural incomes. Remittances account for more than one-fifth of the total income of the poorest people. This dependence suggests that Uganda has an informal welfare system, with more affluent households transferring resources to less prosperous ones. Remittances are an important source of income for all expenditure groups. This informal welfare system is therefore more complex than simply a case of the better-off remitting to the poor. It would be possible to calculate the net transfers received in each quartile from the 1992/93 IHS, but these calculations are beyond the scope of this report.

Table A.3: MAJOR INCOME SOURCES IN UGANDA

	Quartile			
	Bottom	Lower Middle	Upper Middle	Top
ALL OF UGANDA	*100.0*	*100.0*	*100.0*	*100.0*
Earned income	69.5	78.0	80.1	86.5
Agriculture	53.4	56.1	53.4	38.3
Business	8.1	10.3	14.2	27.0
Employment	6.4	9.9	11.1	19.7
Government employment	2.1	4.2	4.6	9.6
Private employment	4.3	5.6	6.5	10.1
Residual earned income	1.5	1.8	1.4	1.4
Unearned income	30.5	22.0	19.9	13.5
Rent	2.8	1.6	1.9	1.9
Remittances	21.2	16.4	14.9	9.7
Transfers	0.7	0.1	0.2	0.1
Dowry	3.9	2.4	1.7	1.1
Inheritance	1.9	1.5	1.3	0.8

Source: Calculations from the 1992/93 Integrated Household Survey.

Table A.4: MAJOR INCOME SOURCES IN UGANDA

Urban/Rural

	Quartile			
	Bottom	Lower Middle	Upper Middle	Top
URBAN	*100.0*	*100.0*	*100.0*	*100.0*
Earned income	70.0	77.2	75.3	86.1
Agriculture	17.9	15.8	9.9	5.7
Business	19.3	27.9	29.4	42.8
Employment	29.3	31.0	33.9	36.3
Government employment	8.3	10.2	11.4	16.5
Private employment	21.0	20.8	22.6	19.8
Residual earned income	3.5	2.6	2.1	1.2
Unearned income	30.0	22.8	24.7	13.9
Rent	5.2	3.0	5.0	3.7
Remittances	22.0	16.0	18.0	9.4
Transfers	0.3	0.2	0.3	0.1
Dowry	1.5	1.3	0.4	0.3
Inheritance	1.0	2.3	1.0	0.5
RURAL	*100.0*	*100.0*	*100.0*	*100.0*
Earned income	69.4	78.2	81.1	86.7
Agriculture	57.3	62.5	62.4	58.6
Business	6.9	7.5	11.1	17.2
Employment	3.9	6.5	6.4	9.4
Government employment	1.5	3.3	3.2	5.3
Private employment	2.5	3.2	3.2	4.1
Residual earned income	1.3	1.7	1.2	1.5
Unearned income	30.6	21.9	19.0	13.3
Rent	2.6	1.4	1.2	0.8
Remittances (private)	21.1	16.4	14.2	9.9
Transfers (government)	0.8	0.1	0.2	0.1
Dowry	4.2	2.6	2.0	1.5
Inheritance	2.0	1.4	1.3	1.0

Note: The quartiles are defined with reference to the national population: the cut-off points for each quartile are the same for all regions. Thus, the poorest quartile in the northern rural region will include more than 25 percent of the northern population, and the poorest quartile in urban areas will include less than 25 percent of the urban population.

Source: Calculations from the 1992/93 Integrated Household Survey.

Table A.5: AGRICULTURAL REVENUE SOURCES IN UGANDA

	Quartile			
	Bottom	Lower Middle	Upper Middle	Top
Crops	95.0	94.9	95.2	92.4
Grains	26.3	21.3	19.4	15.9
Maize	8.6	7.8	7.4	7.1
Rice	1.1	1.2	1.3	1.0
Millet	8.4	7.1	6.1	4.8
Sorghum	7.4	5.0	4.0	2.9
Other Grains	0.9	0.2	0.6	0.1
Matooke and tubers	41.4	45.2	49.4	52.4
Matooke	8.6	12.7	18.0	21.4
Sweet potatoes	15.2	15.5	13.8	15.0
Cassava	16.2	15.5	15.8	14.3
Other tubers	1.4	1.5	1.8	1.7
Pulses, beans, and nuts	17.5	18.5	17.0	16.0
Beans	8.6	10.1	10.0	9.6
Peas	0.8	0.5	0.3	0.3
Groundnuts	4.8	4.5	4.2	4.1
Cow peas	0.2	0.4	0.2	0.2
Simsim	2.2	2.4	1.6	1.4
Other pulses, beans, and nuts	0.8	0.7	0.7	0.4
Fruit	2.2	2.2	2.2	2.2
Sugar cane	0.3	0.2	0.1	0.2
Other fruits	2.0	2.1	2.1	2.0
Vegetables	1.4	1.4	1.2	1.3
Onions	0.1	0.2	0.2	0.2
Other vegetables	1.3	1.1	1.1	1.1
Cash crops	5.9	6.1	5.8	4.5
Coffee	3.7	3.8	3.4	3.0
Cotton	1.6	1.2	1.6	0.9
Tea	0.0	0.1	0.1	0.2
Tobacco	0.5	1.0	0.6	0.3
Other cash crops	0.1	0.1	0.1	0.1
Other crops	0.3	0.2	0.1	0.1
Animal revenue	5.0	5.1	4.8	7.6
TOTAL	*100.0*	*100.0*	*100.0*	*100.0*

Note: This table reports average household shares. Agricultural revenue includes crops grown for own consumption valued at producer prices. Revenue is reported rather than income because costs were not disaggregated.

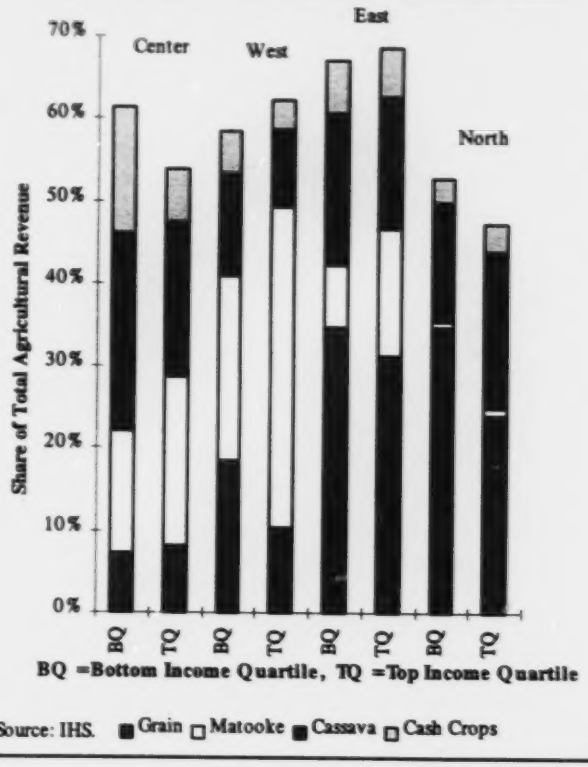
Source: Calculations from the 1992/93 Integrated Household Survey.

14. Food crops account for about 90 percent of total income earned from agriculture, including home consumption (Table A.5). This reliance is partly a legacy of the retreat to subsistence since 1972, prompted by insecurity and low producer prices. The main difference between the poor and the nonpoor with respect to food crops is that the poor rely more on cassava, millet, and sorghum, and the nonpoor depend on matooke. This

distinction is partly caused by regional differences: matooke can only be grown in the relatively fertile banana belt around the central and western regions; sorghum and millet are generally grown in the poor areas of the north and east. Outside the rural northern region the nonpoor receive more income from animal husbandry, possibly reflecting the risky nature of investments in relatively lumpy assets such as cattle. The reversal of this pattern in the north reflects the existence of poor pastoralists in that area.

15. Although cash crops account for a very small share of average agricultural incomes (5 to 6 percent in 1992/93), they are equally important for the poor as for the nonpoor. Coffee is the most important cash crop. In the rural central region, where it is most commonly grown, coffee accounts for nearly 15 percent of the agricultural revenue of people in the poorest quartile com-pared with 6 percent for people in the highest quartile (see Statistical Annex Table IX.3). The share of cash crops was at a low point in the survey year because of the low international price for coffee; if the survey had been carried out in 1994/95, it would have indicated a much higher share of traditional cash crops in agricultural revenue.

Figure A.2: CROPS AND AGRICULTURAL REVENUE



16. The finding that the poor grow proportionately more coffee than the better-off may seem counterintuitive to those more familiar with countries like Cote d'Ivoire, Ghana and Kenya, where coffee producers tend to be relatively better-off. However, several factors help to explain the relatively high share of coffee in poor people's incomes. Historically, coffee was adopted by many smallholders. Where it is still grown, it is usually on a small scale. Coffee trees last many years and require little attention, so poor farmers may have little incentive to uproot them. Nonetheless, traditional forms of coffee are relatively unprofitable in Uganda, especially prior to liberalization of the coffee sector. Consequently, larger and more progressive farmers are likely to have moved out

of coffee and into more remunerative activities. Indeed, one route by which the post-1987 economic reforms are likely to have benefited the poor is through the trade-liberalizing devaluation which brought much higher prices for exportables. Another route is the liberalization of internal and external marketing of both cash and food crops.

17. Despite the collapse in world coffee prices since liberalization, the domestic relative producer price increased considerably. The domestic terms of trade calculated for cash crops and food crops show this clearly (Figure A.3). This relative price change benefited the poor in the coffee growing areas because of their higher dependence on coffee. Cash crop income may have accrued more to men than to women, exacerbating intra-household inequality. Household level data unfortunately do not allow us to document this effect.

HOUSEHOLD EXPENDITURE

18. The poor are much less involved in the market than the nonpoor (Table A.6). While the share of total food spending is more or less constant across the three bottom quartiles and falls only a little for the top quartile (suggesting that the income elasticity of food expenditure is only slightly less than one), the share of home-produced food is much higher for the poor.

19. People in the bottom quartile buy 41 percent of their total food consumption from outside of the family farm, while this share is 53 percent in the top quartile. As might be expected, matooke is more popular with the nonpoor, whereas maize and cassava are important items for the poor. Meat, but not fish, behaves as a luxury good, reflecting the relative abundance of fish in Uganda (see Statistical Annex Table IX.4). Wealthier urban households spend more on education than do their rural or poorer urban counterparts.

20. The unusually high share of food in total expenditure across quartiles could indicate reporting bias in the survey data. However, when disaggregating the population in a different way, the share of food in total expenditure shows a more normal pattern, i.e. declines at the upper end: for the poorest 86 percent the share of spending on food is around 68 percent, for the next 10 percent it is 65 percent, and for the rest (4 percent) it is 51 percent.

CHANGES IN POVERTY: EVIDENCE FROM HOUSEHOLD SURVEYS

21. Data from two household surveys are available for Uganda: the 1989/90 Household Budget Survey, an expenditure survey carried out mainly to revise the consumer price index, and the 1992/93 Integrated Household Survey, which contains much more information than just expenditure data. A comparison of these surveys shows that there has been a dramatic fall in household expenditure. Using alternative price deflators and correcting for sampling differences do not change the basic result. But a large increase in poverty does not seem plausible, given production and other data from the same period. A closer investigation of the two surveys reveals that the 1992/93 survey

Table A.6: SHARE OF MAJOR COMMODITY GROUPS IN HOUSEHOLD BUDGETS

				Expenditure Quartiles			
	All	Urban	Rural	Bottom	Lower Middle	Upper Middle	Top
SHARE OF TOTAL SPENDING	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Food, kind	31.1	5.9	39.8	37.5	37.7	37.2	35.1
Food, cash	32.9	46.6	28.2	29.8	30.0	31.0	25.2
Nondurables	3.5	3.6	3.4	4.1	3.7	3.7	3.3
Semi-durables	18.3	26.4	15.5	18.1	17.4	16.3	19.5
Durables	1.9	2.8	1.6	0.8	1.1	1.2	2.7
Health	4.2	3.6	4.5	3.6	4.0	4.2	4.5
Education	5.0	8.5	3.8	4.1	3.8	4.1	5.9
Miscellaneous	3.0	2.6	3.2	2.1	2.3	2.3	3.8
MEAN SHARE ACROSS HOUSEHOLDS							
Food, kind	37.1	8.4	41.7	40.2	39.9	39.2	31.3
Food, cash	31.1	51.6	27.8	27.8	28.7	30.4	35.6
Nondurables	3.8	3.9	3.9	4.1	4.0	3.6	3.5
Semi-durables	17.6	23.4	16.7	18.9	18.0	16.8	17.1
Durables	1.2	1.6	1.2	0.7	1.0	1.1	1.9
Health	3.6	3.7	3.6	3.2	3.5	3.8	3.9
Education	2.8	5.0	2.5	3.0	2.6	2.6	3.1
Miscellaneous	2.6	2.3	2.7	2.1	2.3	2.3	3.5

Notes: Semi-durables include services, rent, and fuel. Shares of expenditure can be calculated in two ways: as the share of total spending, or as the average of the share across households. The first measure weights better-off households more because they constitute a larger share of total spending.

Source: Calculations from the 1992/93 Integrated Household Survey.

suffers from systematic underreporting of expenditure; the survey design switched from a detailed list of prompting consumption items bought during the thirty days immediately prior to the interview to an open format expenditure questionnaire with minimum prompting. Therefore, it is not possible to draw any firm conclusions about changes in *absolute* poverty from the two surveys. However, the rest of the survey, which is the first nationally representative household survey of Uganda, provides a rich source of socio-economic information about households. In addition, it includes a small-scale establishment and household enterprise survey as well as a community survey.

22. **Relative Poverty**. We can, however, assess what has happened to *relative poverty*. Ignoring changes in the mean household expenditure per capita overtime, we ask: what has happened to the distribution around these means? Two poverty lines are chosen for illustrative purposes: two-thirds of the mean household expenditure and one-third of the mean, and they are applied to both surveys separately.

23. Using the two-thirds of the mean expenditure poverty line and not adjusting for price variation, we find that 39 percent of the population were poor in 1989/90, while 44 percent were poor in 1992/93. However, when the seven districts not surveyed in 1989/90

are excluded, the figure for 1992/93 is only 40 percent. In other words, there is no evidence of a change in relative poverty. Taking the poverty line of one-third of the mean and applying it to both surveys shows a fall in hard-core poverty from 11.6 percent to 9.4 percent. Adjusting for regional price variation should give more accurate insight into welfare changes. However, the adjustments do not alter our earlier conclusions (no change in relative poverty broadly defined and a slight fall in relative hard-core poverty). Still, poverty may have fallen in absolute terms, but incompatibility of the two data points prevents us from reaching any conclusion about change in absolute poverty.

24. These headcount measures are rather insensitive to changes in the welfare of the poorest. The *poverty gap measure* may therefore be preferable. It measures the difference between the expenditure of those households falling below the poverty line and the poverty line itself. The poverty gap is calculated for each household and aggregated to give a measure of the total proportional shortfall in expenditure vis-à-vis the poverty line. The national poverty gap remains the same when using the two-thirds of the mean expenditure poverty line, and falls when using the one-third of the mean expenditure poverty line. These measures seem to confirm that broad poverty did not change during 1989/90-1992/93, while hard-core poverty fell. But it is important to keep in mind that it is not possible to determine whether the absolute mean expenditure of the poor increased or decreased between the two surveys; we can only determine what happened to the distribution around the mean.

25. **Inequality**. Using the data on household expenditures per adult equivalent, Gini coefficients are constructed for the population (Table A.7). Overall, Uganda's income distribution is more equitable than that in Kenya, for example, where the Gini coefficient for rural areas was 0.49 (0.35 in Uganda) and the coefficient for urban areas was 0.45 (0.44 in Uganda) in 1992.

26. Gini coefficients indicate that inequality has risen slightly in Uganda. They also show a widening urban-rural gap (evidenced by a higher national value of the Gini coefficient than the weighted average of urban and rural coefficients) and increased inequality within urban areas, while within rural areas inequality has been reduced. These results are consistent with the analysis of relative poverty, that is, hard-core poverty seems to have fallen. They are also robust (remain qualitatively the same) to controls

Table A.7: GINI COEFFICIENTS FOR UGANDA

	1989	1992	1992 excl. 7 Districts
Nominal Expenditures			
National	0.377	0.409	0.405
Urban	0.373	0.439	0.436
Rural	0.364	0.352	0.344
Expenditures Deflated by Poverty Lines			
National	0.368	0.383	0.379
Urban	0.371	0.439	0.439
Rural	0.364	0.353	0.346

Source: Calculations from the 1992/93 IHS.

Box A.2: Poverty in Sub-Saharan Africa

A recent World Bank report[a/] summarizes the status and changes in poverty in Sub-Saharan Africa. Despite the generally poor economic performance and high and increasing incidence of poverty, the link between good macroeconomic policies and lower levels of poverty is evident. Even more evident is the link between a deteriorating macroeconomic framework and a high incidence of poverty. Countries which have deteriorating macroeconomic policies indicate an increase in the percentage of people living on less than US$1 a day.

The wealthier Sub-Saharan African countries, with GNP per capita in excess of US$460, generally perform better with respect to all key poverty indicators. In the middle income group (US$288 to US$459), a number of social indicators, though not all, are better than in the lower income group. For all key social indicators, without exception, the worst performer is always a country from the poorest income group, and the best performer is always one from the wealthier group. Primary enrollment rates, for example, reach an average of 107 percent in the wealthier group, while in the middle income group and low income group the figures are 74 and 61 percent, respectively. The corresponding figures for female enrollment are 100, 63, and 51 percent. Access to health services in the richer group is 74 percent of the population but only 46 and 49 percent for the middle and poorest group, respectively.

The majority of the poor live in rural areas where households are larger, adult migration increase, dependency ratios, and access to education is more limited than in urban areas. However, urban poverty is growing rapidly.

There are serious difficulties in measuring change in poverty in Africa. Few countries are able to provide estimates of income or expenditure distributions for two or more periods in time. In some countries for which such data exist, the timing of one or more of the surveys may be inappropriate if the reference year is atypical, say a drought year. In addition, methodology, sampling, and definitions used in surveys are not consistent, which make the comparison difficult. The latter is particularly evident in the case of Uganda.

Something can be said, however, for Sub-Saharan Africa as a whole, i.e., there has been a small increase in the overall percentage of the population living in poverty since 1985. Due to the growing size of the overall population, there are substantially more people living in poverty now than in 1985. The picture that emerges from those countries where household survey data exist over time, is an ambiguous one. Overall economic indicators stagnated, yet social indicators improved, especially long-term indicators such as life expectancy, child mortality, adult literacy and access to safe water. On the other hand, while the change in the number of people living below the international poverty line is insignificant in the middle and low-income countries, access to health services in the latter two groups has actually fallen, while in all three income groups there has been no change in primary enrollment.

[a/] World Bank (1994). "The Many Faces of Poverty." Status Report on Poverty in Sub-Saharan Africa. Technical Department, Africa Region.

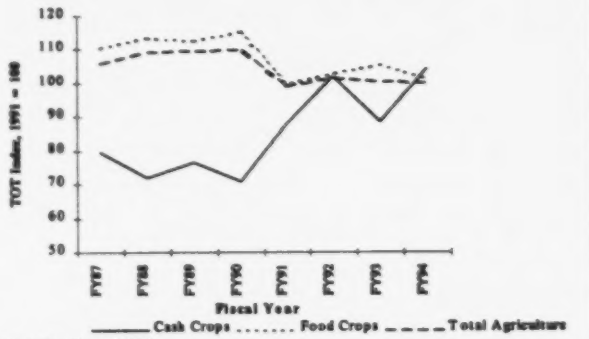
for price variation, as indicated by the expenditure figures deflated by regional poverty lines. Deflating by poverty lines does, however, reduce the size of the increase in inequality since allowing for price differences narrows the rural-urban gap.

27. These results have some plausibility. According to national accounts estimates, nonagricultural sectors have grown more during 1989-92 and have benefited urban residents more. Furthermore, this growth may have increased inequality within the urban sector by providing more opportunities for the better-off and by attracting poor migrants.

DOMESTIC TERMS OF TRADE AND AGRICULTURAL PRODUCTION

28. In the absence of adequate, comparable microdata to measure the change in absolute poverty over time, it is useful to look at domestic terms of trade and production and consumption patterns to get some idea of how different groups have fared during adjustment (Figure A.3).[4] The real farmgate prices for cash crops and food crops have behaved very differently during this period. The relative price for traditional cash crops was very low until the early 1990s mainly because of low international commodity prices and a monopolistic and inefficient market structure. In the early 1990s, the trend was radically reversed. This reversal can be attributed to the liberalization of the cash crop sector, mainly coffee, as the world prices for cash crops continued to be very low. As opposed to cash crops, the relative price of food crops appears to have been quite stable between 1985/86 and 1989/90 but declined by 15 percent during 1990/91, remaining at the lower level, except for a small peak in 1992/93 (resulting from the drought). It is not possible to determine how much adjustment has contributed to the modest fall in food prices; the restoration of peace and security are also important factors in increasing the supply of food crops to the market. Nonetheless, the shift in relative prices in favor of cash crops can clearly be attributed to adjustment measures in the coffee sector.

Figure A.3: DOMESTIC TERMS OF TRADE



Source: Statistics Dept, MFEP.

29. A change in the incentives faced by smallholders is a necessary first step toward successful rural development. The fall in food prices observed in the data means that the relative prices of other rural economic activities are going up. This rise is necessary to shift resources toward more profitable activities, such as cash crops, nontraditional exports, and off-farm activities. Nontraditional exports and off-farm activities have much

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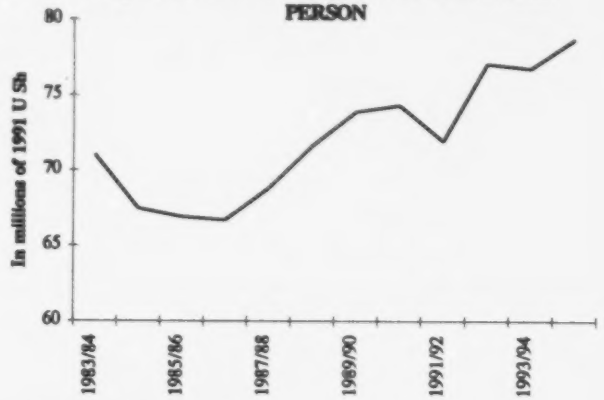
[4] The domestic terms of trade are defined for food crops, as the ratio of their price index to the price index of nonfood goods and services, and for cash crops as the ratio of their price index to the price index of nonfood goods and services. The use of food and nonfood CPI yields similar results to the GDP deflator.

higher returns, but are more complex and risky. Currently the top expenditure quartile in the rural areas earns 27 percent from off-farm activities while the bottom quartile earns only 12 percent from these activities. Therefore, a decline in food prices is only a necessary condition for a shift in resource allocation; sufficient conditions include year-round access to food through the market and improved technology.

30. Adjustment seems to have contributed to a shift in the incentive structure in the right direction for sustainable rural development to take-off. This transition may not have been harmful to the poorest, as they appear to be *net buyers* of food[5]. This result is not as implausible as it might at first appear: the poor receive substantial remittances from others and rely on cash crops just as much as other groups—or more in the case of coffee in the central region. Poverty has not necessarily been reduced by falling food prices, but rural incentives, which have moved in the right direction and without directly making the poor worse-off. However, incomes are still low, and access to quality social services, particularly education and health, remains extremely limited.

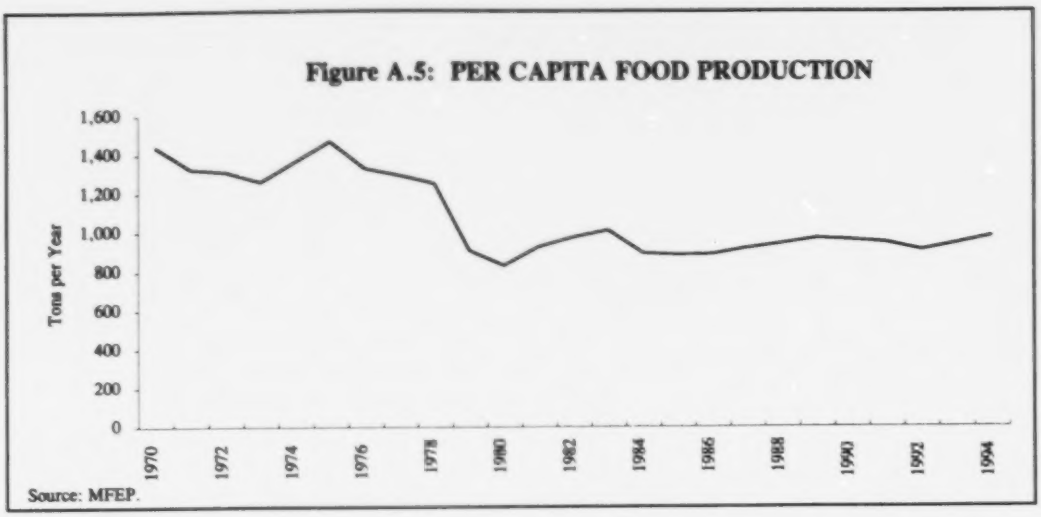
31. Examination of per capita production figures (for the rural population) shows that production of commonly grown cereals, pulses, and oil seeds increased substantially during 1987-92: maize by 11 percent, beans by 5 percent, and sesame by 17 percent. These three crops contribute 19 percent of the agricultural income for the bottom quartile in rural areas. The gains came mainly from increasing the area under

Figure A.4: AGRICULTURAL GDP PER RURAL PERSON



Source: Statistics Dept, MFEP.

5 Overall, the poor rely more heavily on subsistence than the nonpoor, and many poor households are both sellers and buyers of food crops during a given year. This makes it difficult to assess the poor's net position. Preliminary analysis of expenditure and income patterns reveals, however, that the poorest (bottom quartile) in Uganda may be net buyers of food. More specifically, the rural-urban breakdown shows that 18 percent of the income of the urban poor come from food crops, while 43 percent of their expenditure are spent on them. Hence, the urban poor are net buyers and have benefited from the recent decline in the relative price of food crops. For the rural poor food crops provide 47 percent of their income, while they spend 54 percent on food crops. Therefore, the rural poor seem also to be net buyers of food crops and hence have benefited from the (modest) fall in their relative price. However, due to differences in the structure of the income and expenditure parts of the survey and prices applied (farmgate prices in income vs. market prices in consumption), more work is required to establish the robustness of this finding.



cultivation. The importance of these crops in exports has also increased during the period. Root crops and matooke, on the other hand, did not show a similar per capita increase: production of matooke increased very little, while that of cassava fell slightly, and sweet potato was stagnant. As these three crops represent 40 percent of agricultural (imputed) income, the net effect on production per person, although likely to be positive, is small.

32. According to the data available from the Agricultural Secretariat (Bank of Uganda), the real price of frequently purchased agricultural inputs, such as seed, chemicals, hand tools, and so on, either decreased or increased only slightly during 1989-94. As a result, the cost of producing a unit of output has not increased. Unfortunately, Uganda's agriculture is a low input-low output type so that reduced input prices have not had much of an impact on production.

ANNEX II
MACROECONOMIC PROJECTIONS

The data in the following tables are presented in fiscal years, with 1990 meaning 1989/90 or July 1, 1989 to June 30, 1990. Date in constant prices use calendar year 1991 as the base year.

The projections for the four sectors—public, private, external and monetary—are presented within a consistency framework. Consequently, since 1993/94 is treated as a projected year by the model, some data may differ from published statistics.

Uganda

Key Indicators Table

Main Macro Aggregates	Annual Growth Rate 92	93	94	95	96	97	5-year Rates/Indicators 84-89	90-94	94-99
GDP	3.2	8.5	5.4	7.0	7.0	6.5	3.3	5.5	6.3
GDP per capita /a	-0.5	5.2	2.4	4.0	4.0	3.5	0.5	2.2	3.3
Investment	-6.9	4.0	2.7	36.4	17.6	13.0	12.3	1.1	14.3
Consumption	2.6	10.5	8.3	5.9	3.7	3.8	3.3	6.4	4.4
Consumption per capita /a	-1.1	7.1	5.3	2.9	0.8	0.8	0.5	3.1	1.4
Exports GNFS	17.1	-7.7	23.8	4.2	7.1	7.6	0.4	5.0	6.6
Imports GNFS	-2.7	9.1	21.9	17.0	1.5	1.3	7.6	6.1	4.1
ICOR							..	2.8	2.9
Import Elasticity	-0.9	1.1	4.1	2.4	0.2	0.2	2.3	1.1	0.6

Debt/Liquidity Indicators (%)	90	91	92	93	94	95	96	97	99	2003
Current Account/GDP	-9.9	-13.4	-14.1	-12.1	-8.9	-4.5	-3.9	-4.2	-6.3	-8.0
Overall Budget Balance/GDP	-5.8	-7.2	-14.2	-11.1	-11.3	-7.2	-6.5	-5.8	-6.6	-6.4
Interest Due/XGS	0.0	0.0	0.0	2.6	17.3	7.3	6.6	7.2	8.1	7.5
Repayment Due/XGS	45.6	65.5	116.0	66.2	36.6	11.6	11.3	13.3	17.2	16.8
Total Debt Service Due/XGS	45.6	65.5	116.0	68.8	53.9	18.9	17.9	20.6	25.4	24.4
DOD/GDP	54.6	77.2	91.4	81.7	74.0	59.6	58.2	57.3	61.4	53.9
DOD/XGS	1404.9	1841.5	2448.7	1705.2	962.6	523.8	535.1	599.8	703.9	680.8
Gross Reserves (mos. imports)	0.6	0.9	1.5	1.9	3.7	4.9	6.3	7.2	7.2	4.5

Financing Plan	Period Averages (US$, millions) 1990-91	1992-94	1995-97
Official capital grants	207	250	229
Private Investment	3	4	10
Net Long Term Borrowing	169	139	229
All other capital flows	34	82	-81
Total financing /b	416	429	387

/a Calculated using IECSE population series.
/b Total financing = -(CAB + Change in reserves.)

Uganda

National Accounts

	Actual				Estimate		Projection				
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2003
A. In Current Prices (bil. LCUs)											
GDP at Market Prices	1387.5	1848.1	2782.5	3947.6	4448.8	5134.4	5773.8	6480.5	7178.7	7952.2	11974.5
Net Indirect Taxes	80.1	119.5	156.7	244.5	288.5	399.7	483.9	582.6	567.7	679.4	1225.0
GDP at Factor Cost	1307.4	1728.6	2625.8	3703.1	4160.3	4734.6	5289.9	5897.9	6611.0	7272.9	10749.5
Agriculture	736.0	905.5	1329.3	1881.1	2020.3	2371.4	2597.0	2844.1	3114.7	3411.1	4906.6
Industry	150.4	224.8	367.7	505.3	591.2	764.3	882.7	1019.6	1163.6	1328.4	2267.9
of which Manufacturing	74.6	103.1	170.6	229.6	279.7	375.9	438.2	510.7	595.2	693.7	1280.0
Services	420.9	598.3	928.8	1316.7	1548.9	1599.0	1810.2	2034.1	2332.8	2533.4	3575.0
Resource Balance	-151.3	-278.1	-438.3	-605.7	-660.8	-486.0	-503.5	-573.7	-767.0	-866.4	-1386.8
Imports (GNFS)	234.4	390.7	637.5	821.7	990.8	1054.1	1092.6	1151.6	1375.5	1510.6	2278.7
Exports (GNFS)	83.1	112.6	199.2	216.0	330.1	568.1	589.1	577.8	608.5	644.2	891.9
Total Expenditure	1538.8	2126.2	3220.8	4553.2	5109.6	5620.4	6277.3	7054.2	7945.7	8818.6	13361.3
Consumption	1373.5	1852.8	2797.0	3995.4	4536.4	4850.2	5324.6	5900.7	6617.7	7331.6	11091.3
Government	141.3	194.0	394.1	495.0	327.0	401.5	470.6	543.1	658.5	777.9	1477.0
Private	1232.2	1658.8	2402.9	3500.4	4209.4	4448.7	4854.0	5357.5	5959.2	6553.6	9614.3
Gross Domestic Investment	165.2	273.4	423.8	557.9	573.2	770.2	952.7	1153.5	1328.1	1487.1	2270.0
Government	57.5	105.1	196.0	296.5	423.4	382.3	436.7	493.6	553.5	584.3	934.1
Private	108.6	162.0	230.0	252.3	149.8	387.9	516.0	659.9	774.6	902.8	1336.0
Total fixed investment	166.1	267.1	426.0	548.8	573.2	770.2	952.7	1153.5	1328.1	1487.1	2270.0
Total investment in stocks	-0.9	6.3	-2.1	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Domestic Savings	13.9	-4.7	-14.5	-47.8	-87.6	284.2	449.2	579.8	561.1	620.7	883.2
+ Net Factor Income (NFY)	-24.6	-32.1	-83.6	-58.8	-66.7	-39.1	-20.3	-22.2	-50.9	-32.5	-54.9
+ Net Current Transfers (NCT)	24.9	44.3	56.2	199.5	333.1	294.3	299.2	321.0	378.8	397.7	483.4
= National Savings	14.3	7.6	-41.9	93.0	178.7	539.4	728.1	878.6	889.0	985.8	1311.8
Gross National Product	1362.9	1816.0	2698.9	3888.8	4382.1	5095.3	5753.5	6458.3	7127.9	7919.7	11919.6
Gross National Disposable Income	1387.8	1860.4	2755.1	4088.3	4715.2	5389.6	6052.7	6779.3	7506.6	8317.4	12403.0
B. Shares of GDP (current prices)											
GDP at Market Prices	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Net Indirect Taxes	5.8	6.5	5.6	6.2	6.5	7.8	8.4	9.0	7.9	8.5	10.2
Agriculture value added	53.0	49.0	47.8	47.7	45.4	46.2	45.0	43.9	43.4	42.9	41.0
Industry value added	10.8	12.2	13.2	12.8	13.3	14.9	15.3	15.7	16.2	16.7	18.9
of which Manufacturing	5.4	5.6	6.1	5.8	6.3	7.3	7.6	7.9	8.3	8.7	10.7
Services value added	30.3	32.4	33.4	33.4	34.8	31.1	31.4	31.4	32.5	31.9	29.9
Resource Balance	-10.9	-15.0	-15.8	-15.3	-14.9	-9.5	-8.7	-8.9	-10.7	-10.9	-11.6
Imports (GNFS)	16.9	21.1	22.9	20.8	22.3	20.5	18.9	17.8	19.2	19.0	19.0
Exports (GNFS)	6.0	6.1	7.2	5.5	7.4	11.1	10.2	8.9	8.5	8.1	7.4
Total Expenditure	110.9	115.0	115.8	115.3	114.9	109.5	108.7	108.9	110.7	110.9	111.6
Government consumption	10.2	10.5	14.2	12.5	7.4	7.8	8.2	8.4	9.2	9.8	12.3
Private consumption	88.8	89.8	86.4	88.7	94.6	86.6	84.1	82.7	83.0	82.4	80.3
Government investment	4.1	5.7	7.0	7.5	9.5	7.4	7.6	7.6	7.7	7.3	7.8
Private investment	7.8	8.8	8.3	6.4	3.4	7.6	8.9	10.2	10.8	11.4	11.2
Gross Domestic Savings	1.0	-0.3	-0.5	-1.2	-2.0	5.5	7.8	8.9	7.8	7.8	7.4
Gross National Savings	1.0	0.4	-1.5	2.4	4.0	10.5	12.6	13.6	12.4	12.4	11.0
Gross National Product	98.2	98.3	97.0	98.5	98.5	99.2	99.6	99.7	99.3	99.6	99.5
Gross National Disposable Income	100.0	100.7	99.0	103.6	106.0	105.0	104.8	104.6	104.6	104.6	103.6
Memorandum Items:											
Price indices (% change)											
GDP deflator	45.4	27.2	45.9	30.7	6.9	7.9	5.1	5.4	5.0	5.0	5.0
Consumer price index	45.4	24.6	42.1	28.4	7.8	7.5	5.0	5.0	7.4	5.5	5.1
Total GDP (million current US$)	4,341.1	3,354.7	2,896.0	3,284.7	4,053.9	5,504.2	6,189.7	6,616.4	6,373.3	6,898.7	9,387.5
Conversion factor used (LCU/US$)	319.6	550.9	960.8	1201.8	1097.4	932.8	932.8	979.5	1126.4	1152.7	1275.6
Per capita gross national product (Atlas method in 1987 US$, in calendar years)	261	261	261	270							

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Uganda

National Accounts

	Actual				Estimate		Projection				
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2003
C. In Constant 1991 Prices (bil. LCUs)											
GDP at Market Prices	2073.2	2170.8	2239.7	2430.5	2561.8	2741.1	2933.0	3123.6	3295.4	3476.6	4306.9
GDP at Factor Cost	1929.6	2033.6	2106.4	2287.1	2386.5	2518.1	2677.0	2832.0	3023.3	3167.6	3851.7
Agriculture	1040.1	1069.0	1056.9	1157.2	1176.9	1233.4	1286.4	1341.7	1399.4	1459.6	1727.3
Industry	237.4	261.4	290.5	312.4	351.8	406.1	446.7	491.4	533.6	579.8	812.0
of which Manufacturing	84.8	84.8	84.8	84.8	97.3	116.8	129.6	143.8	159.7	177.2	269.1
Services	652.1	703.2	758.9	817.5	857.9	878.7	943.9	998.9	1090.2	1128.2	1312.4
Resource Balance	-346.0	-362.5	-325.0	-381.7	-462.7	-565.2	-562.9	-557.2	-554.8	-578.9	-720.8
Imports (GNFS)	496.7	501.1	487.3	531.5	648.1	758.3	769.7	779.7	792.6	831.5	1030.0
Exports (GNFS)	150.7	138.5	162.2	149.8	185.4	193.1	206.9	222.6	237.8	252.6	309.3
Total Expenditure	2419.2	2533.3	2564.8	2812.2	3027.7	3312.5	3500.9	3684.5	3853.0	4058.2	5031.1
Consumption	2093.5	2181.1	2236.9	2471.3	2677.5	2834.9	2939.1	3049.6	3185.8	3346.7	4137.5
Government	220.3	213.9	265.2	236.0	293.7	357.0	395.2	427.1	482.3	540.3	838.3
Private	1873.2	1967.2	1971.7	2235.2	2397.7	2509.4	2585.8	2672.1	2768.6	2887.1	3461.3
Gross Domestic Investment	325.8	352.2	327.8	341.0	350.2	477.6	561.7	635.0	667.2	711.5	893.6
Government	115.3	134.4	151.2	179.9	202.3	100.7	86.0	68.0	60.2	38.4	73.4
Private	214.0	208.1	178.5	151.9	138.5	364.2	460.7	550.0	589.2	654.1	796.3
Total fixed investment	329.2	342.5	329.7	331.9	340.8	464.8	546.7	618.0	649.4	692.5	869.7
Total investment in stocks	-3.5	9.8	-1.9	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Terms of trade (TT) effect	25.4	5.9	-10.0	-10.0	30.5	215.6	208.2	168.7	112.9	102.0	93.9
Gross domestic income	2098.6	2176.7	2229.8	2420.5	2592.2	2956.6	3141.1	3292.3	3408.2	3578.6	4400.8
Domestic saving (TT adjusted)	5.2	-4.4	-7.2	-50.8	-85.3	121.7	202.0	242.7	222.5	231.9	263.3
D. Annual Growth Rates (1991 Prices)											
GDP at Market Prices	6.1	4.7	3.2	8.5	5.4	7.0	7.0	6.5	5.5	5.5	5.5
Agriculture	5.4	2.8	-1.1	9.5	1.7	4.8	4.3	4.3	4.3	4.3	4.3
Industry	6.6	10.1	11.2	7.5	12.6	15.4	10.0	10.0	8.6	8.7	8.9
of which Manufacturing	0.0	0.0	0.0	0.0	14.7	20.0	11.0	11.0	11.0	11.0	11.0
Services	6.8	5.6	6.2	7.7	7.5	6.6	8.9	7.6	5.6	5.5	5.2
Imports (GNFS)	-3.0	0.9	-2.7	9.1	21.9	17.0	1.5	1.3	1.7	4.9	5.5
Exports (GNFS)	5.7	-8.1	17.1	-7.7	23.8	4.2	7.1	7.6	6.8	6.2	5.3
Total Expenditure	4.1	4.7	1.2	9.6	7.7	9.4	5.7	5.2	4.6	5.3	5.5
Consumption	4.2	4.2	2.6	10.5	8.3	5.9	3.7	3.8	4.5	5.1	5.5
Investment	3.3	8.1	-6.9	4.0	2.7	36.4	17.6	13.0	5.1	6.6	5.5
Gross domestic income	3.4	3.7	2.4	8.6	7.1	14.1	6.2	4.8	3.5	5.0	5.4
Gross domestic saving	-74.6	-185.6	62.5	607.6	67.9	-242.7	65.9	20.2	-8.3	4.3	3.9
Per Capita Growth Rates:											
Per capita GDP (mp)	3.1	1.8	-0.5	5.2	2.4	4.0	4.0	3.5	2.5	2.5	2.5
Per capita total consumption	1.3	1.3	-1.1	7.1	5.3	2.9	0.8	0.8	1.5	2.1	2.5
Per capita private consumption	0.4	2.1	-3.4	9.9	4.2	1.7	0.1	0.4	0.7	1.3	1.7

E. Period Average Indicators	1984-89	1989-94	1994-99
Marginal national saving rate	-0.2	0.1	0.3
Incremental capital-output ratio	..	2.8	2.9
Import elasticity	2.3	1.1	0.6

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Exports and Imports

	Actual				Estimate		Projection				
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2003
A. Value in Current Prices (US$ millions)											
Total Merchandise Exports (FOB)	210	176	172	157	230	537	555	509	454	467	581
Primary products	159	127	130	114	176	482	494	440	376	379	439
CP.X.BEV.COFFEE	159	127	117	99	152	454	458	394	317	307	336
CP.X.OAGRI.COTTON	0	0	8	10	6	4	9	17	27	39	65
CP.X.BEV.TEA	0	0	5	4	7	9	11	14	16	16	20
CP.X.FOOD.FISH	0	0	0	0	12	14	15	16	16	16	19
Manufactured goods	0	0	0	0	0	0	0	0	0	0	0
Other goods	51	49	42	44	54	55	61	69	78	88	141
Total Merchandise Imports (CIF)	584	545	445	534	727	936	955	949	985	1,054	1,438
Food	0	0	0	0	46	60	62	61	70	80	96
Other Consumer Goods	0	0	0	0	97	117	80	45	-20	-93	-43
POL and Other Energy	91	91	91	91	68	77	80	81	95	112	145
Intermediate Goods n.e.i.	0	0	0	0	300	368	386	386	449	527	649
Primary Goods	0	0	0	0	82	101	106	106	123	144	178
Manufactured Goods	0	0	0	0	218	267	280	280	326	383	471
Capital Goods	0	0	0	0	216	314	348	377	392	429	591
B. Value in Constant 1991 Prices (US$ millions)											
Total Merchandise Exports (FOB)	194	166	182	174	205	217	235	256	276	295	366
KP.X.BEV.COFFEE	..	..	..	..	..	..	..	..	..	..	..
KP.X.OAGRI.COTTON	..	..	..	..	..	..	..	..	..	..	..
KP.X.BEV.TEA	..	..	..	..	..	..	..	..	..	..	..
KP.X.FOOD.FISH	..	..	..	..	..	..	..	..	..	..	..
Manufactures	..	..	..	..	..	..	..	..	..	..	..
Other Exports	..	..	..	..	..	..	..	..	..	..	..
Total Merchandise Imports (CIF)	614	551	436	517	650	774	774	771	784	821	1,017
Food	..	..	..	..	..	..	..	..	..	..	..
Other Consumer Goods	..	..	..	..	..	..	..	..	..	..	..
POL and Other Energy	..	..	..	..	..	..	..	..	..	..	..
Intermediate Goods n.e.i.	..	..	..	..	..	..	..	..	..	..	..
Primary Goods	..	..	..	..	..	..	..	..	..	..	..
Manufactured Goods	..	..	..	..	..	..	..	..	..	..	..
Capital Goods	..	..	..	..	..	..	..	..	..	..	..
Memorandum Items:											
Export volume growth rate	25.0	-14.5	9.9	-4.4	17.8	5.7	8.2	8.8	7.8	6.9	5.7
Import volume growth rate (CIF)	1.4	-10.2	-20.9	18.7	25.7	19.0	0.0	-0.3	1.6	4.7	5.5
C. Price Indices (1991 = 100)											
Merchandise Export	108	106	94	90	112	247	236	199	165	158	159
Merchandise Import	95	99	102	103	112	121	123	123	126	128	141
Merchandise Terms of Trade	114	107	92	87	100	204	191	162	131	123	112
D. Non-Factor Services (indices base 1991 = 100)											
Exports of NFS - price index	49	48	43	41	41	42	43	44	45	46	47
Imports of NFS - price index	98	102	106	107	95	95	99	96	99	102	104

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Balance of Payments (millions of US$)

	Actual				Estimate		Projection				
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2003
Total Exports of GNFS	246	199	195	206	301	609	632	590	540	559	699
Merchandise (FOB)	210	176	172	157	230	537	555	509	454	467	581
Non-Factor Services	36	23	23	49	71	72	76	81	87	92	119
Total Imports of GNFS	676	671	576	718	903	1,130	1,171	1,176	1,221	1,310	1,786
Merchandise (FOB)	584	545	445	534	727	936	955	949	985	1,054	1,438
Non-Factor Services	92	126	131	184	176	194	216	226	236	256	348
Resource Balance	-430	-472	-381	-512	-602	-521	-540	-586	-681	-752	-1,087
Net Factor Income	-77	-58	-87	-53	-61	-42	-22	-23	-45	-28	-43
Factor receipts	-77	-58	-87	-49	11	17	42	43	22	43	44
Factor Payments	0	0	0	4	72	59	63	65	67	71	87
Total Interest DUE (scheduled)	0	0	0	4	54	46	45	46	47	49	56
Interest Paid	22	20	87	54	54	46	45	46	47	49	56
Due but not paid	-22	-20	-87	-50	0	0	0	0	0	0	0
Other Factor Payments	0	0	0	0	18	14	19	19	21	22	31
Net private Current Transfers	78	81	59	166	304	316	321	328	336	345	379
Current Receipts	78	81	59	166	304	316	321	328	336	345	379
of which workers' remittances	0	0	0	0	0	0	0	0	0	0	0
Current Payments	0	0	0	0	0	0	0	0	0	0	0
Net official current transfers	0	0	0	0	0	0	0	0	0	0	0
Current Account Balance	-429	-449	-410	-399	-359	-247	-241	-281	-390	-435	-751
Official capital grants	153	262	224	277	250	225	229	234	240	246	271
Private investment (net)	6	1	2	4	5	5	9	15	19	23	57
Direct Investment	6	1	2	4	5	5	9	15	19	23	57
Portfolio investment	0	0	0	0	0	0	0	0	0	0	0
Net LT Borrowing	215	122	92	145	180	259	235	193	235	246	328
Disbursements per DRS	360	195	163	232	294	331	311	277	333	349	453
LT Repayments (scheduled)	77	92	125	104	114	73	76	84	98	104	125
Principal repaid	64	58	125	104	114	73	76	84	98	104	125
Due but not paid	13	34	0	0	0	0	0	0	0	0	0
Other long-term inflows (net)	-68	19	54	18	0	0	0	0	0	0	0
Adjustments to Scheduled debt servic	-9	14	-87	-50	0	0	0	0	0	0	0
Debt Service not paid	10	14	-115	-52	31	11	0	0	0	0	0
Reduction in arrears/prepayments (-	19	0	-28	-2	31	11	0	0	0	0	0
Other Capital Flows (net)	55	13	180	51	14	-78	-90	-75	-10	35	32
Net Short-Term (ST) Capital	24	-39	-35	-26	-38	-79	-79	-60	-10	25	20
Capital Flows n.e.i.	6	7	8	9	0	0	0	0	0	10	12
Errors and omissions	25	45	207	68	52	2	-11	-15	0	0	0
Change in net intern'l reserves (- indicates increase in assets)	10	37	-2	-29	-90	-164	-142	-86	-94	-115	63
Memorandum Items:											
Total Gross Reserves, of which	35	50	73	112	301	486	645	741	773	829	700
Total Reserves minus gold	35	50	74	112	301	486	645	741	773	829	700
Gold (at year end London price)	6	7	2	2	[illegible]	0	0	0	0	0	0
Total Gross Reserves in months M	1	1	2	2	4	5	6	7	7	7	4
Exchange rates											
Annual Average (LCU/US$)	320	551	961	1202	1097	933	933	979	1126	1153	1276
At end year (LCU/US$)	400	700	1166	1199	1015	933	956	1053	1140	1166	1292
Index real av. X-Rate (1990 =100)	100.0	76.7	69.9	72.7	..	..	..	..	..	..	..
IFS											
Current Account Balance as % GDP	-9.9	-13.4	-14.1	-12.1	-8.9	-4.5	-3.9	-4.2	-6.1	-6.3	-8.0

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External Debt Stocks and Flows (millions of US$)

	Actual				Estimate		Projection				
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2003
A. Gross Disbursements											
Public & Publicly Guaranteed	360.0	195.0	163.4	231.5	294.0	331.3	310.9	277.3	333.2	349.3	453.4
a. Multilateral	220.0	148.0	153.0	195.5	235.0	246.1	244.2	218.0	249.5	260.2	325.0
of which IDA	175.0	138.0	146.0	137.0	188.0	186.1	169.2	161.0	165.4	163.5	214.7
of which IBRD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Bilateral	88.0	39.0	9.4	32.0	58.0	73.7	51.8	44.3	68.7	74.1	113.4
Private creditors	52.0	8.0	1.0	4.0	1.0	11.5	15.0	15.0	15.0	15.0	15.0
of which bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Private Non-Guaranteed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Long-Term Disbursements	360.0	195.0	163.4	231.5	294.0	331.3	310.9	277.3	333.2	349.3	453.4
Net Short-Term Capital	23.5	-38.8	-34.7	-25.7	-38.2	-79.3	-79.0	-60.0	-10.0	25.0	20.0
IMF Purchases	42.0	89.0	55.0	28.0	27.5	46.9	56.2	65.6	0.0	0.0	0.0
Total Disburs. (LT+IMF+ST)	425.5	245.2	183.7	233.8	283.3	298.9	288.1	282.9	323.2	374.3	473.4
B. Amortizations											
Public & Publicly Guaranteed	64.0	58.0	125.4	104.1	114.0	72.8	76.2	84.4	98.0	103.5	125.1
a. Multilateral	20.0	20.0	63.4	65.1	55.0	35.0	31.0	31.0	34.0	33.0	62.5
of which IDA	1.0	2.0	2.0	4.0	5.0	10.0	10.0	10.0	12.0	14.0	33.0
of which IBRD	5.0	6.0	5.0	8.0	7.0	6.0	3.0	2.0	2.0	0.0	0.0
b. Bilateral	19.0	16.0	20.0	16.0	47.0	31.8	34.3	39.3	50.2	54.1	46.6
Private creditors	25.0	22.0	42.0	23.0	12.0	6.0	10.9	14.1	13.8	16.4	15.9
of which bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Private Non-Guaranteed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Long-Term Amortizations	64.0	58.0	125.4	104.1	114.0	72.8	76.2	84.4	98.0	103.5	125.1
IMF Repurchases	43.0	37.0	34.0	18.3	9.8	25.8	38.7	55.8	61.4	60.0	42.0
Total Amortizations (LT+IMF)	107.0	95.0	159.4	122.4	123.8	98.6	114.9	140.2	159.4	163.5	167.1
C. Net Disbursements											
Public & Publicly Guaranteed	296.0	137.0	38.0	127.4	180.0	258.5	234.8	192.8	235.2	245.8	328.3
a. Multilateral	200.0	128.0	89.6	130.4	180.0	211.1	213.2	187.0	215.5	227.2	262.4
of which IDA	174.0	136.0	144.0	133.0	183.0	176.1	159.2	151.0	153.4	149.5	181.7
of which IBRD	-5.0	-6.0	-5.0	-8.0	-7.0	-6.0	-3.0	-2.0	-2.0	0.0	0.0
b. Bilateral	69.0	23.0	-10.6	16.0	11.0	41.9	17.5	5.0	18.5	20.0	66.8
Private creditors	27.0	-14.0	-41.0	-19.0	-11.0	5.5	4.1	0.9	1.2	-1.4	-0.9
of which bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Private Non-Guaranteed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Long-Term Net Disb.	296.0	137.0	38.0	127.4	180.0	258.5	234.8	192.8	235.2	245.8	328.3
Net Short-Term Capital	23.5	-38.8	-34.7	-25.7	-38.2	-79.3	-79.0	-60.0	-10.0	25.0	20.0
Net use of IMF Credit	-1.0	52.0	21.0	9.7	17.7	21.1	17.5	9.8	-61.4	-60.0	-42.0
Total net Disburs. (LT+IMF+ST)	318.5	150.2	24.3	111.4	159.5	200.3	173.3	142.6	163.8	210.8	306.3
D. Interest											
Public & Publicly Guaranteed	22.0	20.0	78.0	47.0	52.8	42.0	40.9	42.1	43.4	45.7	53.9
a. Multilateral	16.0	14.0	40.0	25.0	25.0	18.0	19.2	20.5	21.5	23.3	32.8
of which IDA	4.0	6.0	8.0	9.0	10.0	12.0	13.2	13.5	15.2	16.1	21.7
of which IBRD	3.0	2.0	2.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
b. Bilateral	4.0	3.0	14.4	8.0	23.0	23.0	20.1	18.8	18.3	18.3	16.9
Private creditors	2.0	3.0	23.6	14.0	4.8	1.0	1.6	2.8	3.6	4.1	4.3
of which bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Private Non-Guaranteed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Interest on Long-Term Loans	22.0	20.0	78.0	47.0	52.8	42.0	40.9	42.1	43.4	45.7	53.9
Interest on Short-Term Debt	5.0	5.0	5.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IMF Charges	14.0	12.0	4.0	2.0	1.0	3.5	3.6	3.7	3.5	3.2	2.1
Total Interest (LT+IMF+ST)	41.0	37.0	87.0	53.0	53.8	45.5	44.5	45.8	46.9	48.9	56.0

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External Debt Stocks and Flows (millions of US$)

	Actual				Estimate		Projection				
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2003
E. External Debt											
Public & Publicly Guaranteed	2097.0	2257.0	2273.0	2328.0	2560.7	2821.6	3124.7	3307.3	3544.1	3867.3	4886.0
a. Multilateral	1152.0	1350.0	1426.0	1611.0	1826.5	2048.1	2322.3	2508.3	2722.8	2948.0	3972.1
of which IDA	816.0	940.0	1159.0	1267.0	1425.0	1606.1	1765.3	1916.3	2069.7	2219.1	2912.4
of which IBRD	34.0	29.0	26.0	19.0	12.0	6.0	3.0	2.0	0.0	0.0	0.0
b. Bilateral	653.0	811.0	651.0	663.0	685.0	725.0	742.8	732.0	749.7	847.8	845.5
Private creditors	292.0	96.0	196.0	54.0	49.2	48.5	59.6	67.0	71.6	71.5	68.5
a. Bonds	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Private Non-Guaranteed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Long-Term DOD	2097.0	2257.0	2273.0	2328.0	2560.7	2821.6	3124.7	3307.3	3544.1	3867.3	4886.0
Short-Term Debt	28.0	40.0	44.0	10.0	77.3	77.3	77.3	77.3	77.3	77.3	77.3
Use of IMF Credit	245.0	294.0	330.0	344.0	361.1	382.1	399.7	409.5	348.2	288.2	98.0
Total DOD (LT+IMF+ST), of which	2370.0	2591.0	2647.0	2682.0	2999.1	3281.0	3601.7	3794.1	3969.6	4232.8	5061.3
Principal Arrears	184.0	362.7	426.4	195.9	173.4	162.8	162.8	162.8	162.8	162.8	162.8
Interest Arrears	10.0	15.0	182.8	83.9	77.3	77.3	77.3	77.3	77.3	77.3	77.3
F. Debt and Debt Burden Indicators:											
Total debt service (mil US$)	148.0	132.0	246.4	175.4	177.6	144.1	159.4	186.0	206.2	212.5	223.1
Interest (LT + ST + IMF)	41.0	37.0	87.0	53.0	53.8	45.5	44.5	45.8	46.9	48.9	56.0
Principal (LT + IMF)	107.0	95.0	159.4	122.4	123.8	98.6	114.9	140.2	159.4	163.5	167.1
For Total DOD and Total Debt Service (TDS):											
DOD/Exports (GNFS + WR) ratio	1404.9	1841.5	2448.7	1705.2	962.6	523.8	535.1	599.8	705.8	703.9	680.8
DOD / GDP	54.6	77.2	91.4	81.7	74.0	59.6	58.2	57.3	62.3	61.4	53.9
TDS/Exports (GNFS + WR) ratio	87.7	93.8	227.9	111.5	57.0	23.0	23.7	29.4	36.7	35.3	30.0
IBRD Exposure Indicators:											
IBRD Debt Service/Public DS	9.3	10.3	3.4	6.6	4.8	6.1	2.6	1.6	1.4	0.0	0.0
Pref Creditor DS/Public DS	81.4	83.3	27.0	28.7	20.3	50.8	58.5	67.2	66.5	62.5	55.2
IBRD DS/Exports (XGS+ WR)	4.7	5.7	6.5	6.4	2.6	1.1	0.4	0.3	0.4	0.0	0.0
Country Share in IBRD Portfolio					0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Public Finance (bil. LCUs)

	Actual				Estimate		Projection				
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2003
Total Current Revenues	95	137	186	281	366	510	619	752	784	956	1763
Direct taxes	9	14	24	41	53	76	101	130	159	189	322
Indirect taxes	77	114	150	219	289	400	484	583	568	679	1225
On domestic goods and services	38	52	71	64	86	117	144	243	302	382	766
On international trade	39	62	79	154	203	282	339	340	266	298	459
Non-Tax Receipts	8	9	12	22	25	34	35	39	57	87	216
Total Current Expenditures	98	131	323	323	442	496	554	631	748	891	1595
Interest on external debt	8	17	81	57	52	35	34	37	45	48	63
Interest on domestic debt	1	1	9	13	9	6	-5	-3	-9	11	1
Transfers to private sector	0	0	0	0	53	53	53	53	53	53	53
Transfers to other NFPS	0	0	0	0	0	0	0	0	0	0	0
Subsidies	0	0	0	0	0	0	0	0	0	0	0
Consumption	90	112	233	254	327	401	471	543	658	778	1477
Wages and salaries	13	24	48	63	84	124	158	195	263	327	665
Other consumption	77	88	185	191	243	277	312	348	395	451	812
Budgetary Savings	-4	6	-137	-42	-76	14	65	121	36	65	168
Capital Revenues	0	0	0	0	0	0	0	0	0	0	0
Total Capital Expenditures	77	139	258	395	426	384	439	496	555	586	936
Capital transfers	0	5	9	1	3	2	2	2	2	2	2
Budgetary fixed investment	77	134	250	394	423	382	437	494	553	584	934
Overall Balance (- = deficit)	-80	-132	-396	-437	-502	-371	-373	-374	-520	-521	-768
Sources of Financing (+)	80	132	396	437	502	371	373	374	520	521	768
Official Capital Grants	20	70	195	314	275	210	213	229	270	283	346
External Borrowing (net)	92	65	142	201	157	174	159	141	230	273	368
Monetary System Credit (net)	-17	4	44	-17	-53	-70	-25	-77	185	5	42
Other Domestic Borrowing (net)	-15	-7	14	-60	123	57	26	81	-166	-40	12
Shares of GDP at Current Prices											
Current revenues	6.8	7.4	6.7	7.1	8.2	9.9	10.7	11.6	10.9	12.0	14.7
Current expenditures	7.1	7.1	11.6	8.2	9.9	9.7	9.6	9.7	10.4	11.2	13.3
Budgetary savings	-0.3	0.3	-4.9	-1.1	-1.7	0.3	1.1	1.9	0.5	0.8	1.4
Capital revenues	0.0	0.2	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Capital expenditures	5.5	7.5	9.3	10.0	9.6	7.5	7.6	7.6	7.7	7.4	7.8
Overall Balance (- = deficit)	-5.8	-7.2	-14.2	-11.1	-11.3	-7.2	-6.5	-5.8	-7.2	-6.6	-6.4
Official capital grants	1.5	3.8	7.0	7.9	6.2	4.1	3.7	3.5	3.8	3.6	2.9
External Borrowing (net)	6.6	3.5	5.1	5.1	3.5	3.4	2.8	2.2	3.2	3.4	3.1
Monetary System Credit (net)	-1.2	0.2	1.6	-0.4	-1.2	-1.4	-0.4	-1.2	2.6	0.1	0.4
Other Domestic Borrowing (net)	-1.0	-0.4	0.5	-1.5	2.8	1.1	0.5	1.2	-2.3	-0.5	0.1
Government Debt (DOD at the end of the year)											
External Debt in billions of LCU	704	1428	2544	3223	2347	2370	2695	3149	3649	4077	5650
External Debt in millions of US$	2202	2592	2648	2682	2312	2541	2818	2991	3202	3496	4372
Debt To Monetary Sys. (LCU mil)	9	13	57	40	-13	-83	-109	-185	0	5	87
Other Domestic Debt (LCU mil)	..	..	..	..	129	182	208	289	123	82	-55
Total Government debt	..	..	..	..	2464	2469	2794	3253	3772	4165	5683
Total Govt debt as percent GDP	..	..	..	..	55	48	48	50	53	52	47
Tax Burden Indicators (%)											
Direct taxes / GDP	0.7	0.8	0.8	1.0	1.2	1.5	1.7	2.0	2.2	2.4	2.7
Indir taxes on domestic G&S / GDP	2.7	2.8	2.6	1.6	1.9	2.3	2.5	3.7	4.2	4.8	6.4
Indir taxes on dom G&S / priv Consu	3.1	3.1	3.0	1.8	2.0	2.6	3.0	4.5	5.1	5.8	8.0
taxes int'l trade / merch imports	20.9	20.8	18.4	24.1	25.4	32.3	38.1	36.5	24.0	24.5	25.0

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ANNEX III
STATISTICAL ANNEX

COUNTRY DATA SHEET **TABLE I.1**

General		
Area, land	sq km	197,097
Population (1991)		16,671,705
Density (1991)	per sq km	85
Socio-Economic Indicators (1992/93)		
Women's share of credit		
Total	percent	9.2
Rural	"	13.6
Urban	"	7.3
Mean hours worked per day		
Men	hours per day	7.0
Women	"	8.4
Women's share of land		
Total	percent	26.0
Rural	"	28.7
Urban	"	39.7
Social Indicators		
Mean births (1992/93)		
Rural	of all women > 40	6.8
Urban	"	6.3
Health		
Infant mortality (1991)		
0 - 11 months	per 1,000 live births	122
12 - 59 months	"	93
0 - 59 months	"	203
Population per physician (1989)		23,000
Population per hospital (1992)		185,350
Education (1992/93)		
Literacy rate		
All Uganda	percent, age 6 and over	61
Male	"	75
Female	"	49
Urban	"	86
Rural	"	57
Primary school gross enrollment ratios		
Total	% of relevant population	91
Male	"	99
Female	"	83
Urban	"	103
Rural	"	90
Secondary school gross enrollment ratios		
Total	% of relevant population	13
Male	"	17
Female	"	10
Urban	"	30
Rural	"	11

Sources: 1992/93 IHS and Key Economic Indicators (MFEP), January 1995.

THE 1991 POPULATION AND HOUSING CENSUS **TABLE I.2**
Final Results

Region & District		Total	Male	Female	Urban	Rural	Percentage Urban
CENTRAL	Kalangala	16,371	9,929	6,442	1,376	14,995	8.4
	Kampala	774,241	377,225	397,016	774,241	0	100.0
	Kiboga	141,607	72,538	69,069	5,277	136,330	3.7
	Luwero	449,691	224,399	225,292	36,531	413,160	8.1
	Masaka	838,736	415,552	423,184	77,196	761,540	9.2
	Mpigi	913,867	455,703	458,164	137,126	776,741	15.0
	Mubende	500,976	254,081	246,895	34,541	466,435	6.9
	Mukono	824,604	413,580	411,024	98,735	725,869	12.0
	Rakai	383,501	189,082	194,419	14,869	368,632	3.9
	Totals	4,843,594	2,412,089	2,431,505	1,179,892	3,663,702	24.4
EASTERN	Iganga	945,783	461,079	484,704	44,002	901,781	4.7
	Jinja	289,476	143,336	146,140	80,893	208,583	27.9
	Kamuli	485,214	237,513	247,701	8,262	476,952	1.7
	Kapchorwa	116,702	58,577	58,125	4,604	112,098	3.9
	Kumi	236,694	112,719	123,975	11,749	224,945	5.0
	Mbale	710,980	355,803	355,177	60,298	650,682	8.5
	Pallisa	357,656	173,836	183,820	2,927	354,729	0.8
	Soroti	430,390	209,530	220,860	46,274	384,116	10.8
	Tororo	555,574	273,220	282,354	63,657	491,917	11.5
	Totals	4,128,469	2,025,613	2,102,856	322,666	3,805,803	7.8
NORTHERN	Apac	454,504	222,854	231,650	5,783	448,721	1.3
	Arua	637,941	307,679	330,262	26,712	611,229	4.2
	Gulu	338,427	166,318	172,109	38,297	300,130	11.3
	Kitgum	357,184	172,640	184,544	15,327	341,857	4.3
	Kotido	196,006	92,481	103,525	9,702	186,304	4.9
	Lira	500,965	247,607	253,358	27,568	473,397	5.5
	Moroto	174,417	80,061	94,356	12,981	161,436	7.4
	Moyo	175,645	85,054	90,591	8,787	166,858	5.0
	Nebbi	316,866	152,093	164,773	23,943	292,923	7.6
	Totals	3,151,955	1,526,787	1,625,168	169,100	2,982,855	5.4
WESTERN	Bundibugyo	116,566	57,816	58,750	9,215	107,351	7.9
	Bushenyi	579,137	279,543	299,594	..	..	..
	Hoima	197,851	99,547	98,304	4,616	193,235	2.3
	Kabale	417,218	197,695	219,523	29,246	387,972	7.0
	Kabarole	746,800	369,818	376,982	36,954	709,846	4.9
	Kasese	343,601	167,672	175,929	39,892	303,709	11.6
	Kibaale	220,261	109,756	110,505	2,408	217,853	1.1
	Kisoro	186,681	86,406	100,275	7,485	179,196	4.0
	Masindi	260,796	131,936	128,860	14,352	246,444	5.5
	Mbarara	798,774	394,101	404,673	..	..	..
	Ntungamo	289,222	139,083	150,139	..	..	..
	Rukungiri	390,780	187,885	202,895	12,985	377,795	3.3
	Totals	4,547,687	2,221,258	2,326,429	157,153	2,723,401	3.5
UGANDA	Totals	16,671,705	8,185,747	8,485,958	..	..	..

Source: Statisticts Department, MFEP.

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POPULATION AND LITERACY BY RURAL-URBAN DISTRIBUTION

TABLE I.3

Age 10 and Over

	RURAL			URBAN			TOTAL		
District	Literate	Total	Percent Literate	Literate	Total	Percent Literate	Literate	Total	Percent Literate
Apac	155,010	294,870	53%	2,841	3,938	72%	157,851	298,808	53%
Arua	182,108	405,732	45%	11,861	18,647	64%	193,969	424,379	46%
Bundibugyo	27,257	70,256	39%	3,367	6,346	53%	30,624	76,602	40%
Bushenyi	194,911	359,646	54%	7,541	9,806	77%	202,452	369,452	55%
Gulu	93,707	204,937	46%	19,252	27,293	71%	112,959	232,230	49%
Hoima	71,477	127,873	56%	2,518	3,174	79%	73,995	131,047	56%
Iganga	268,940	586,305	46%	20,386	28,823	71%	289,326	615,128	47%
Jinja	82,634	136,036	61%	46,979	56,281	83%	129,613	192,317	67%
Kabale	122,418	245,573	50%	14,334	20,228	71%	136,752	265,801	51%
Kabarole	218,629	457,770	48%	19,466	26,028	75%	238,095	483,798	49%
Kalangala	8,160	11,481	71%	794	964	82%	8,954	12,445	72%
Kampala	..	..	..	485,036	548,455	88%	485,036	548,455	88%
Kamuli	125,588	311,382	40%	3,814	5,546	69%	129,402	316,928	41%
Kapchorwa	38,972	72,255	54%	2,099	3,107	68%	41,071	75,362	54%
Kasese	88,899	190,123	47%	19,010	27,110	70%	107,909	217,233	50%
Kibale	69,188	137,468	50%	1,149	1,568	73%	70,337	139,036	51%
Kiboga	48,986	90,368	54%	2,756	3,503	79%	51,742	93,871	55%
Kisoro	34,625	107,558	32%	2,305	4,839	48%	36,930	112,397	33%
Kitgum	88,635	233,183	38%	7,369	11,075	67%	96,004	244,258	39%
Kotido	12,229	119,120	10%	2,962	6,325	47%	15,191	125,445	12%
Kumi	62,829	154,329	41%	5,074	7,943	64%	67,903	162,272	42%
Lira	152,636	313,908	49%	14,376	20,627	70%	167,012	334,535	50%
Luwero	157,230	272,726	58%	18,537	24,329	76%	175,767	297,055	59%
Masaka	297,260	493,519	60%	42,217	51,230	82%	339,477	544,749	62%
Masindi	81,895	163,169	50%	8,952	10,756	83%	90,847	173,925	52%
Mbale	236,032	435,239	54%	30,044	41,578	72%	266,076	476,817	56%
Mbarara	255,772	499,939	51%	26,339	32,266	82%	282,111	532,205	53%
Moroto	8,154	103,738	8%	4,701	8,760	54%	12,855	112,498	11%
Moyo	49,559	112,575	44%	4,268	6,175	69%	53,827	118,750	45%
Mpigi	358,634	506,433	71%	79,956	91,534	87%	438,590	597,967	73%
Mubende	171,420	303,855	56%	18,835	22,704	83%	190,255	326,559	58%
Mukuno	281,870	476,761	59%	49,939	64,366	78%	331,809	541,127	61%
Nebbi	88,793	194,827	46%	10,069	16,476	61%	98,862	211,303	47%
Ntungamo	87,190	185,994	47%	1,548	1,930	80%	88,738	187,924	47%
Pallisa	108,866	233,973	47%	1,185	1,899	62%	110,051	235,872	47%
Rakai	129,269	243,017	53%	8,230	10,155	81%	137,499	253,172	54%
Rukungiri	136,024	243,266	56%	6,873	9,071	76%	142,897	252,337	57%
Soroti	118,485	265,324	45%	21,031	31,210	67%	139,516	296,534	47%
Tororo	165,633	329,409	50%	30,873	43,858	70%	196,506	373,267	53%
Total	4,879,924	9,693,937	50%	1,058,886	1,309,923	81%	5,938,810	11,003,860	54%

Source: The 1991 Population and Housing Census, Statistics Department, MFEP.

Note: The literacy data presented here are different from those derived from the IHS owing to different sources.

POPULATION AND LITERACY BY SEX DISTRIBUTION **TABLE I.4**

Age 10 and Over

	MALE			FEMALE			TOTAL		
District	Literate	Total	Percent Literate	Literate	Total	Percent Literate	Literate	Total	Percent Literate
Apac	102,274	145,333	70%	55,577	153,475	36%	157,851	298,808	53%
Arua	131,546	201,169	65%	62,423	223,210	28%	193,969	424,379	46%
Bundibugyo	20,330	37,993	54%	10,294	38,609	27%	30,624	76,602	40%
Bushenyi	111,595	175,530	64%	90,857	193,922	47%	202,452	369,452	55%
Gulu	73,549	113,421	65%	39,410	118,809	33%	112,959	232,230	49%
Hoima	41,945	66,213	63%	32,050	64,834	49%	73,995	131,047	56%
Iganga	167,311	296,438	56%	122,015	318,690	38%	289,326	615,128	47%
Jinja	71,295	95,652	75%	58,318	96,665	60%	129,613	192,317	67%
Kabale	76,668	123,056	62%	60,084	142,745	42%	136,752	265,801	51%
Kabarole	138,649	238,208	58%	99,446	245,590	40%	238,095	483,798	49%
Kalangala	5,720	7,968	72%	3,234	4,477	72%	8,954	12,445	72%
Kampala	244,190	268,174	91%	240,846	280,281	86%	485,036	548,455	88%
Kamuli	74,721	153,886	49%	54,681	163,042	34%	129,402	316,928	41%
Kapchorwa	25,934	37,997	68%	15,137	37,365	41%	41,071	75,362	54%
Kasese	64,374	105,675	61%	43,535	111,558	39%	107,909	217,233	50%
Kibale	41,177	69,380	59%	29,160	69,656	42%	70,337	139,036	51%
Kiboga	29,144	48,784	60%	22,598	45,087	50%	51,742	93,871	55%
Kisoro	23,978	49,637	48%	12,952	62,760	21%	36,930	112,397	33%
Kitgum	68,299	116,219	59%	27,705	128,039	22%	96,004	244,258	39%
Kotido	11,425	58,007	20%	3,766	67,438	6%	15,191	125,445	12%
Kumi	41,056	75,765	54%	26,847	86,507	31%	67,903	162,272	42%
Lira	112,919	164,487	69%	54,093	170,048	32%	167,012	334,535	50%
Luwero	94,225	147,950	64%	81,542	149,105	55%	175,767	297,055	59%
Masaka	176,201	268,745	66%	163,276	276,004	59%	339,477	544,749	62%
Masindi	56,412	88,851	63%	34,435	85,074	40%	90,847	173,925	52%
Mbale	150,876	239,572	63%	115,200	237,245	49%	266,076	476,817	56%
Mbarara	161,241	262,235	61%	120,870	269,970	45%	282,111	532,205	53%
Moroto	9,005	49,411	18%	3,850	63,087	6%	12,855	112,498	11%
Moyo	35,131	56,545	62%	18,696	62,205	30%	53,827	118,750	45%
Mpigi	224,597	298,070	75%	213,993	299,897	71%	438,590	597,967	73%
Mubende	104,207	166,577	63%	86,048	159,982	54%	190,255	326,559	58%
Mukono	178,832	272,182	66%	152,977	268,945	57%	331,809	541,127	61%
Nebbi	66,426	99,683	67%	32,436	111,620	29%	98,862	211,303	47%
Nyungamo	50,838	88,792	57%	37,900	99,132	38%	88,738	187,924	47%
Pallisa	66,226	113,117	59%	43,825	122,755	36%	110,051	235,872	47%
Rakai	73,865	124,277	59%	63,634	128,895	49%	137,499	253,172	54%
Rukungiri	77,068	119,837	64%	65,829	132,500	50%	142,897	252,337	57%
Soroti	87,810	142,324	62%	51,706	154,210	34%	139,516	296,534	47%
Tororo	116,979	182,606	64%	79,527	190,661	42%	196,506	373,267	53%
Total	3,408,038	5,369,766	63%	2,530,772	5,634,094	45%	5,938,810	11,003,860	54%

Source: The 1991 Population and Housing Census, Statistics Department, MFEP.

Note: The literacy data presented here are different from those derived from the IHS owing to different sources.

GDP BY SECTOR AT CURRENT FACTOR COST **TABLE II.1**

In U Sh Millions

	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Agriculture	*5,599*	*10,655*	*24,113*	*68,961*	*212,264*	*486,739*	*735,988*	*905,511*	*1,329,292*	*1,881,102*	*2,020,304*
Cash Crops	1,688	2,547	2,662	3,278	8,347	20,363	30,190	51,393	90,994	106,306	143,893
Food Crops	2,947	5,934	16,388	48,948	150,736	344,226	530,407	621,652	896,227	1,351,514	1,388,814
Livestock	642	1,626	3,841	12,532	37,294	86,501	119,794	154,728	228,439	279,288	319,512
Forestry	135	259	656	1,927	6,439	15,293	24,001	32,452	44,795	59,819	69,752
Fishing	187	289	566	2,276	9,448	20,356	31,596	45,286	68,837	84,175	98,333
Industry	*866*	*1,704*	*4,322*	*12,823*	*40,062*	*96,291*	*150,440*	*224,773*	*367,731*	*505,290*	*591,151*
Mining & Quarrying	13	23	50	143	341	682	2,047	4,732	8,585	12,171	12,844
Manufacturing	521	970	2,625	7,165	21,928	51,663	74,629	103,139	170,641	229,633	279,713
Coffee, Cotton, Sugar	90	226	745	745	1,858	5,960	9,005	12,254	22,877	25,800	32,287
Food Products	76	123	285	925	3,591	9,416	10,723	13,923	21,448	28,096	33,094
Miscellaneous	355	621	1,595	5,495	16,479	36,287	54,901	76,962	126,316	175,737	214,332
Public Utilities	73	159	400	1,325	3,928	10,139	16,180	24,360	34,523	49,560	63,417
Construction	259	552	1,247	4,190	13,865	33,807	57,584	92,542	153,982	213,926	235,177
Services	*2,590*	*6,107*	*13,260*	*39,950*	*124,408*	*278,707*	*420,947*	*598,303*	*937,203*	*1,316,748*	*1,508,144*
Trade	994	2,101	5,616	19,200	57,061	117,066	170,740	201,812	304,977	418,229	438,804
Hotels & Restaurants	82	147	366	1,288	3,888	9,761	15,862	22,016	34,789	48,540	57,793
Transport & Communication	189	405	1,042	3,318	10,740	26,661	47,131	67,657	102,027	137,011	153,884
Road	159	324	853	2,523	7,993	20,090	35,116	50,320	76,931	105,809	117,534
Rail	15	48	74	222	942	2,103	3,152	4,422	5,193	5,984	7,698
Air	11	27	97	428	1,117	2,563	4,428	5,762	10,090	12,948	14,096
Communication	4	6	18	145	688	1,905	4,435	7,153	9,813	12,270	14,556
General Government	395	1,380	1,493	1,912	11,457	22,655	26,527	52,292	106,539	157,333	198,989
Education	280	727	1,395	3,287	10,194	25,948	40,227	64,484	90,213	152,866	195,693
Health	84	187	427	1,228	3,406	8,100	12,805	23,933	39,136	56,397	59,247
Rents	147	291	725	2,443	7,170	18,563	30,535	52,298	80,352	113,070	133,134
Owner-Occupied Dwellings	207	432	1,096	3,563	9,811	23,268	34,817	54,423	76,512	100,879	112,579
Miscellaneous	212	437	1,100	3,711	10,681	26,685	42,303	59,388	94,258	132,423	158,021
GDP at Factor Cost	*9,055*	*18,466*	*41,695*	*121,734*	*376,734*	*861,737*	*1,307,375*	*1,728,587*	*2,625,826*	*3,703,140*	*4,119,599*
o/w Non-Monetary	2,667	5,540	14,906	45,035	136,922	314,097	478,015	575,817	831,228	1,144,191	1,174,297
Indirect Taxes	774	1,479	2,637	4,385	16,781	37,980	80,098	119,495	156,691	244,450	329,211
GDP at Market Prices	*9,829*	*19,945*	*44,332*	*126,119*	*393,515*	*899,717*	*1,387,473*	*1,848,082*	*2,782,517*	*3,947,590*	*4,448,810*

Source: Statistics Department, MFEP.

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GDP BY SECTOR AT CONSTANT 1991 PRICES **TABLE II.2**
In U Sh Millions

	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Agriculture	*880,041*	*853,943*	*865,105*	*880,866*	*928,443*	*986,602*	*1,040,109*	*1,069,049*	*1,056,897*	*1,157,211*	*1,177,284*
Cash Crops	64,126	69,585	58,146	55,935	55,443	59,274	66,328	68,437	72,028	74,319	80,480
Food Crops	584,848	555,124	584,614	599,999	635,283	678,883	715,074	729,161	705,707	792,566	801,112
Livestock	160,742	155,991	150,498	150,906	159,954	168,892	175,141	182,016	186,067	192,900	198,595
Forestry	29,899	29,713	29,499	30,704	33,020	34,341	35,205	36,593	38,170	40,347	42,016
Fishing	40,426	43,530	42,348	43,322	44,743	45,212	48,361	52,842	54,925	57,079	55,081
Industry	*174,104*	*166,546*	*158,921*	*180,086*	*213,942*	*222,689*	*237,382*	*261,354*	*290,549*	*312,416*	*352,718*
Mining & Quarrying	2,818	2,344	2,058	1,858	1,654	1,434	3,269	5,954	6,690	7,459	7,917
Manufacturing	84,824	80,190	76,301	78,155	91,424	99,943	107,389	117,271	139,467	148,679	170,573
Coffee, Cotton, Sugar	8,817	8,440	8,386	8,747	8,728	11,288	11,271	12,837	19,834	17,228	20,591
Food Products	10,212	9,298	8,776	9,857	13,716	14,456	13,098	15,639	17,051	18,225	19,452
Miscellaneous	65,795	62,452	59,139	59,551	68,980	74,199	83,020	88,795	102,582	113,226	130,530
Public Utilities	12,334	13,220	13,969	14,587	15,507	16,216	16,564	17,611	19,351	20,378	21,471
Construction	74,128	70,792	66,593	85,486	105,357	105,096	110,160	120,518	125,041	135,900	152,757
Services	*517,423*	*512,607*	*515,242*	*534,784*	*573,217*	*610,930*	*652,130*	*703,218*	*758,934*	*817,459*	*873,773*
Trade	171,370	164,886	160,563	164,744	184,488	197,887	210,969	227,244	247,690	270,811	295,039
Hotels & Restaurants	17,129	14,982	15,057	16,751	18,860	20,540	22,951	25,571	28,497	31,554	34,068
Transport & Communication	55,385	57,312	60,247	64,491	69,019	73,450	78,525	84,329	88,109	94,569	100,568
Road	38,311	41,948	44,842	47,625	51,112	55,278	59,303	63,363	66,596	71,446	75,512
Rail	4,914	4,285	4,002	4,285	4,258	4,183	4,604	5,554	5,034	5,206	5,624
Air	4,867	4,224	4,759	5,758	6,490	6,501	6,784	7,086	7,506	8,125	8,610
Communication	7,293	6,855	6,644	6,823	7,159	7,488	7,834	8,326	8,973	9,792	10,822
General Government	56,673	57,239	58,179	59,804	61,579	63,982	65,705	70,666	78,985	84,016	88,298
Education	59,496	60,710	61,096	61,226	61,881	65,501	70,543	74,629	75,726	76,208	77,184
Health	23,455	23,847	24,394	25,275	26,142	27,156	28,089	29,049	30,807	32,067	33,270
Rents	37,116	35,851	36,005	38,337	41,987	47,154	53,331	60,114	67,593	74,834	81,460
Owner-Occupied Dwellings	52,328	53,203	54,423	55,914	57,449	59,105	60,810	62,556	64,362	66,765	68,883
Miscellaneous	44,471	44,577	45,278	48,242	51,812	56,155	61,207	69,060	77,165	86,635	95,003
GDP at Factor Cost	*1,571,568*	*1,533,096*	*1,539,268*	*1,595,736*	*1,715,602*	*1,820,221*	*1,929,621*	*2,033,621*	*2,106,380*	*2,287,086*	*2,403,775*
o/w Non-Monetary	543,504	526,806	550,316	563,196	592,014	624,733	647,827	653,697	633,295	685,158	681,329
Indirect Taxes	115,347	102,842	92,196	97,547	123,313	134,347	143,595	137,200	133,362	143,422	157,765
GDP at Market Prices	*1,686,915*	*1,635,938*	*1,631,464*	*1,693,283*	*1,838,915*	*1,954,568*	*2,073,216*	*2,170,821*	*2,239,742*	*2,430,508*	*2,561,540*

Source: Statistics Department, MFEP.

GDP BY SECTOR AT CURRENT FACTOR COST **TABLE II.3**
Percentage Share of GDP at Factor Cost

	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Agriculture	*61.8*	*57.7*	*57.8*	*56.6*	*56.3*	*56.5*	*56.3*	*52.4*	*50.6*	*50.8*	*49.0*
Cash Crops	18.6	13.8	6.4	2.7	2.2	2.4	2.3	3.0	3.5	2.9	3.5
Food Crops	32.5	32.1	39.3	40.2	40.0	39.9	40.6	36.0	34.1	36.5	33.7
Livestock	7.1	8.8	9.2	10.3	9.9	10.0	9.2	9.0	8.7	7.5	7.8
Forestry	1.5	1.4	1.6	1.6	1.7	1.8	1.8	1.9	1.7	1.6	1.7
Fishing	2.1	1.6	1.4	1.9	2.5	2.4	2.4	2.6	2.6	2.3	2.4
Industry	*9.6*	*9.2*	*10.4*	*10.5*	*10.6*	*11.2*	*11.5*	*13.0*	*14.0*	*13.6*	*14.3*
Mining & Quarrying	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.3
Manufacturing	5.8	5.3	6.3	5.9	5.8	6.0	5.7	6.0	6.5	6.2	6.8
Coffee, Cotton, Sugar	1.0	1.2	1.8	0.6	0.5	0.7	0.7	0.7	0.9	0.7	..
Food Products	0.8	0.7	0.7	0.8	1.0	1.1	0.8	0.8	0.8	0.8	..
Miscellaneous	3.9	3.4	3.8	4.5	4.4	4.2	4.2	4.5	4.8	4.7	..
Public Utilities	0.8	0.9	1.0	1.1	1.0	1.2	1.2	1.4	1.3	1.3	1.5
Construction	2.9	3.0	3.0	3.4	3.7	3.9	4.4	5.4	5.9	5.8	5.7
Services	*28.6*	*33.1*	*31.8*	*32.8*	*33.0*	*32.3*	*32.2*	*34.6*	*35.4*	*35.6*	*36.6*
Trade	11.0	11.4	13.5	15.8	15.1	13.6	13.1	11.7	11.6	11.3	10.7
Hotels & Restaurants	0.9	0.8	0.9	1.1	1.0	1.1	1.2	1.3	1.3	1.3	1.4
Transport & Communication	2.1	2.2	2.5	2.7	2.9	3.1	3.6	3.9	3.9	3.7	3.7
Road	1.8	1.8	2.0	2.1	2.1	2.3	2.7	2.9	2.9	2.9	2.9
Rail	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2
Air	0.1	0.1	0.2	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3
Communication	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.4	0.4	0.3	0.4
General Government	4.4	7.5	3.6	1.6	3.0	2.6	2.0	3.0	4.1	4.2	4.8
Education	3.1	3.9	3.3	2.7	2.7	3.0	3.1	3.7	3.4	4.1	4.8
Health	0.9	1.0	1.0	1.0	0.9	0.9	1.0	1.4	1.5	1.5	1.4
Rents	1.6	1.6	1.7	2.0	1.9	2.2	2.3	3.0	3.1	3.1	3.2
Owner-Occupied Dwellings	2.3	2.3	2.6	2.9	2.6	2.7	2.7	3.1	2.9	2.7	2.7
Miscellaneous	2.3	2.4	2.6	3.0	2.8	3.1	3.2	3.4	3.6	3.6	3.8
GDP at Factor Cost	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
o/w Non-Monetary	29.5	30.0	35.8	37.0	36.3	36.4	36.6	33.3	31.7	30.9	28.5
Indirect Taxes	8.5	8.0	6.3	3.6	4.5	4.4	6.1	6.9	6.0	6.6	8.0
GDP at Market Prices	*108.5*	*108.0*	*106.3*	*103.6*	*104.5*	*104.4*	*106.1*	*106.9*	*106.0*	*106.6*	*108.0*

Source: Statistics Department, MFEP.

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GDP BY SECTOR AT CONSTANT 1991 PRICES **TABLE II.4**

Annual Growth Rates

	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Agriculture	*-3.0*	*1.3*	*1.8*	*5.4*	*6.3*	*5.4*	*2.8*	*-1.1*	*9.5*	*1.7*
Cash Crops	8.5	-16.4	-3.8	-0.9	6.9	11.9	3.2	5.2	3.2	8.3
Food Crops	-5.1	5.3	2.6	5.9	6.9	5.3	2.0	-3.2	12.3	1.1
Livestock	-3.0	-3.5	0.3	6.0	5.6	3.7	3.9	2.2	3.7	3.0
Forestry	-0.6	-0.7	4.1	7.5	4.0	2.5	3.9	4.3	5.7	4.1
Fishing	7.7	-2.7	2.3	3.3	1.0	7.0	9.3	3.9	3.9	-3.5
Industry	*-4.3*	*-4.6*	*13.3*	*18.8*	*4.1*	*6.6*	*10.1*	*11.2*	*7.5*	*12.9*
Mining & Quarrying	-16.8	-12.2	-9.7	-11.0	-13.3	128.0	82.1	12.4	11.5	6.1
Manufacturing	-5.5	-4.8	2.4	17.0	9.3	7.5	9.2	18.9	6.6	14.7
Coffee, Cotton, Sugar	-4.3	-0.6	4.3	-0.2	29.3	-0.2	13.9	54.5	-13.1	..
Food Products	-9.0	-5.6	12.3	39.1	5.4	-9.4	19.4	9.0	6.9	..
Miscellaneous	-5.1	-5.3	0.7	15.8	7.6	11.9	7.0	15.5	10.4	..
Public Utilities	7.2	5.7	4.4	6.3	4.6	2.1	6.3	9.9	5.3	5.4
Construction	-4.5	-5.9	28.4	23.2	-0.2	4.8	9.4	3.8	8.7	12.4
Services	*-0.9*	*0.5*	*3.8*	*7.2*	*6.6*	*6.7*	*7.8*	*7.9*	*7.7*	*6.9*
Trade	-3.8	-2.6	2.6	12.0	7.3	6.6	7.7	9.0	9.3	8.9
Hotels & Restaurants	-12.5	0.5	11.3	12.6	8.9	11.7	11.4	11.4	10.7	8.0
Transport & Communication	3.5	5.1	7.0	7.0	6.4	6.9	7.4	4.5	7.3	6.3
Road	9.5	6.9	6.2	7.3	8.2	7.3	6.8	5.1	7.3	5.7
Rail	-12.8	-6.6	7.1	-0.6	-1.8	10.1	20.6	-9.4	3.4	8.0
Air	-13.2	12.7	21.0	12.7	0.2	4.4	4.5	5.9	8.2	6.0
Communication	-6.0	-3.1	2.7	4.9	4.6	4.6	6.3	7.8	9.1	10.5
General Government	1.0	1.6	2.8	3.0	3.9	2.7	7.6	11.8	6.4	5.1
Education	2.0	0.6	0.2	1.1	5.8	7.7	5.8	1.5	0.6	1.3
Health	1.7	2.3	3.6	3.4	3.9	3.4	3.4	6.1	4.1	3.8
Rents	-3.4	0.4	6.5	9.5	12.3	13.1	12.7	12.4	10.7	8.9
Owner-Occupied Dwellings	1.7	2.3	2.7	2.7	2.9	2.9	2.9	2.9	3.7	3.2
Miscellaneous	0.2	1.6	6.5	7.4	8.4	9.0	12.8	11.7	12.3	9.7
GDP at Factor Cost	*-2.4*	*0.4*	*3.7*	*7.5*	*6.1*	*6.0*	*5.4*	*3.6*	*8.6*	*5.1*
o/w Non-Monetary	-3.1	4.5	2.3	5.1	5.5	3.7	0.9	-3.1	8.2	-0.6
Indirect Taxes	-10.8	-10.4	5.8	26.4	8.9	6.9	-4.5	-2.8	7.5	10.0
GDP at Market Prices	*-3.0*	*-0.3*	*3.8*	*8.6*	*6.3*	*6.1*	*4.7*	*3.2*	*8.5*	*5.4*

Source: Statistics Department, MFEP.

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GDP BY SECTOR AT CONSTANT 1991 PRICES **TABLE II.5**

Percentage Share of GDP at Factor Cost

	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Agriculture	*56.0*	*55.7*	*56.2*	*55.2*	*54.1*	*54.2*	*53.9*	*52.6*	*50.2*	*50.6*	*49.0*
Cash Crops	4.1	4.5	3.8	3.5	3.2	3.3	3.4	3.4	3.4	3.2	3.3
Food Crops	37.2	36.2	38.0	37.6	37.0	37.3	37.1	35.9	33.5	34.7	33.3
Livestock	10.2	10.2	9.8	9.5	9.3	9.3	9.1	9.0	8.8	8.4	8.3
Forestry	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.7
Fishing	2.6	2.8	2.8	2.7	2.6	2.5	2.5	2.6	2.6	2.5	2.3
Industry	*11.1*	*10.9*	*10.3*	*11.3*	*12.5*	*12.2*	*12.3*	*12.9*	*13.8*	*13.7*	*14.7*
Mining & Quarrying	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.3
Manufacturing	5.4	5.2	5.0	4.9	5.3	5.5	5.6	5.8	6.6	6.5	7.1
Coffee, Cotton, Sugar	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.6	0.9	0.8	..
Food Products	0.6	0.6	0.6	0.6	0.8	0.8	0.7	0.8	0.8	0.8	..
Miscellaneous	4.2	4.1	3.8	3.7	4.0	4.1	4.3	4.4	4.9	5.0	..
Public Utilities	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Construction	4.7	4.6	4.3	5.4	6.1	5.8	5.7	5.9	5.9	5.9	6.4
Services	*32.9*	*33.4*	*33.5*	*33.5*	*33.4*	*33.6*	*33.8*	*34.6*	*36.0*	*35.7*	*36.4*
Trade	10.9	10.8	10.4	10.3	10.8	10.9	10.9	11.2	11.8	11.8	12.3
Hotels & Restaurants	1.1	1.0	1.0	1.0	1.1	1.1	1.2	1.3	1.4	1.4	1.4
Transport & Communication	3.5	3.7	3.9	4.0	4.0	4.0	4.1	4.1	4.2	4.1	4.2
Road	2.4	2.7	2.9	3.0	3.0	3.0	3.1	3.1	3.2	3.1	3.1
Rail	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2
Air	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4
Communication	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
General Government	3.6	3.7	3.8	3.7	3.6	3.5	3.4	3.5	3.7	3.7	3.7
Education	3.8	4.0	4.0	3.8	3.6	3.6	3.7	3.7	3.6	3.3	3.2
Health	1.5	1.6	1.6	1.6	1.5	1.5	1.5	1.4	1.5	1.4	1.4
Rents	2.4	2.3	2.3	2.4	2.4	2.6	2.8	3.0	3.2	3.3	3.4
Owner-Occupied Dwellings	3.3	3.5	3.5	3.5	3.3	3.2	3.2	3.1	3.1	2.9	2.9
Miscellaneous	2.8	2.9	2.9	3.0	3.0	3.1	3.2	3.4	3.7	3.8	4.0
GDP at Factor Cost	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
o/w Non-Monetary	34.6	34.4	35.8	35.3	34.5	34.3	33.6	32.1	30.1	30.0	28.3
Indirect Taxes	7.3	6.7	6.0	6.1	7.2	7.4	7.4	6.7	6.3	6.3	6.6
GDP at Market Prices	*107.3*	*106.7*	*106.0*	*106.1*	*107.2*	*107.4*	*107.4*	*106.7*	*106.3*	*106.3*	*106.6*

Source: Statistics Department, MFEP.

SECTORAL DEFLATORS **TABLE II.6**
1991 = 100

	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Agriculture	*0.6*	*1.2*	*2.8*	*7.8*	*22.9*	*49.3*	*70.8*	*84.7*	*125.8*	*162.6*	*171.6*
Cash Crops	2.6	3.7	4.6	5.9	15.1	34.4	45.5	75.1	126.3	143.0	178.8
Food Crops	0.5	1.1	2.8	8.2	23.7	50.7	74.2	85.3	127.0	170.5	173.4
Livestock	0.4	1.0	2.6	8.3	23.3	51.2	68.4	85.0	122.8	144.8	160.9
Forestry	0.5	0.9	2.2	6.3	19.5	44.5	68.2	88.7	117.4	148.3	166.0
Fishing	0.5	0.7	1.3	5.3	21.1	45.0	65.3	85.7	125.3	147.5	178.5
Industry	*0.5*	*1.0*	*2.7*	*7.1*	*18.7*	*43.2*	*63.4*	*86.0*	*126.6*	*161.7*	*167.6*
Mining & Quarrying	0.5	1.0	2.4	7.7	20.6	47.6	62.6	79.5	128.3	163.2	162.2
Manufacturing	0.6	1.2	3.4	9.2	24.0	51.7	69.5	87.9	122.4	154.4	164.0
Coffee, Cotton, Sugar	1.0	2.7	8.9	8.5	21.3	52.8	79.9	95.5	115.3	149.8	..
Food Products	0.7	1.3	3.2	9.4	26.2	65.1	81.9	89.0	125.8	154.2	..
Miscellaneous	0.5	1.0	2.7	9.2	23.9	48.9	66.1	86.7	123.1	155.2	..
Public Utilities	0.6	1.2	2.9	9.1	25.3	62.5	97.7	138.3	178.4	243.2	295.4
Construction	0.3	0.8	1.9	4.9	13.2	32.2	52.3	76.8	123.1	157.4	154.0
Services	*0.5*	*1.2*	*2.6*	*7.5*	*21.7*	*45.6*	*64.5*	*85.1*	*122.4*	*161.1*	*172.6*
Trade	0.6	1.3	3.5	11.7	30.9	59.2	80.9	88.8	123.1	154.4	148.7
Hotels & Restaurants	0.5	1.0	2.4	7.7	20.6	47.5	69.1	86.1	122.1	153.8	169.6
Transport & Communication	0.3	0.7	1.7	5.1	15.6	36.3	60.0	80.2	115.8	144.9	153.0
Road	0.4	0.8	1.9	5.3	15.6	36.3	59.2	79.4	115.5	148.1	155.6
Rail	0.3	1.1	1.8	5.2	22.1	50.3	68.5	79.6	103.2	114.9	136.9
Air	0.2	0.6	2.0	7.4	17.2	39.4	65.3	81.3	134.4	159.4	163.7
Communication	0.1	0.1	0.3	2.1	9.6	25.4	56.6	85.9	109.4	125.3	134.5
General Government	0.7	2.4	2.6	3.2	18.6	35.4	40.4	74.0	134.9	187.3	225.4
Education	0.5	1.2	2.3	5.4	16.5	39.6	57.0	86.4	119.1	200.6	253.5
Health	0.4	0.8	1.8	4.9	13.0	29.8	45.6	82.4	127.0	175.9	178.1
Rents	0.4	0.8	2.0	6.4	17.1	39.4	57.3	87.0	118.9	151.1	163.4
Owner-Occupied Dwellings	0.4	0.8	2.0	6.4	17.1	39.4	57.3	87.0	118.9	151.1	163.4
Miscellaneous	0.5	1.0	2.4	7.7	20.6	47.5	69.1	86.0	122.2	152.9	166.3
GDP at Factor Cost	*0.6*	*1.2*	*2.7*	*7.6*	*22.0*	*47.3*	*67.8*	*85.0*	*124.7*	*161.9*	*171.4*
o/w Non-Monetary	0.5	1.1	2.7	8.0	23.1	50.3	73.8	88.1	131.3	167.0	172.4
Indirect Taxes	0.7	1.4	2.9	4.5	13.6	28.3	55.8	87.1	117.5	170.4	208.7
GDP at Market Prices	*0.6*	*1.2*	*2.7*	*7.4*	*21.4*	*46.0*	*66.9*	*85.1*	*124.2*	*162.4*	*173.7*

Source: Statistics Department, MFEP.

CHANGE IN SECTORAL DEFLATORS **TABLE II.7**

1991 = 100, In Percent

	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Agriculture	*96.1*	*123.4*	*180.9*	*192.0*	*115.8*	*43.4*	*19.7*	*48.5*	*29.2*	*5.6*
Cash Crops	39.1	25.1	28.0	156.9	128.2	32.5	65.0	68.2	13.2	25.0
Food Crops	112.1	162.2	191.0	190.8	113.7	46.3	14.9	49.0	34.3	1.7
Livestock	161.0	144.8	225.4	180.8	119.7	33.5	24.3	44.4	17.9	11.1
Forestry	93.1	155.1	182.2	210.7	128.4	53.1	30.1	32.3	26.3	12.0
Fishing	43.5	101.3	293.1	301.9	113.2	45.1	31.2	46.2	17.7	21.1
Industry	*105.7*	*165.8*	*161.8*	*163.0*	*130.9*	*46.6*	*35.7*	*47.2*	*27.8*	*3.6*
Mining & Quarrying	112.7	147.6	216.8	167.9	130.7	31.7	26.9	61.5	27.2	-0.6
Manufacturing	96.9	184.4	166.5	161.6	115.5	34.4	26.6	39.1	26.2	6.2
Coffee, Cotton, Sugar	162.3	231.8	-4.1	149.9	148.0	51.3	19.5	20.8	29.8	..
Food Products	77.8	145.5	189.0	179.0	148.8	25.7	8.7	41.3	22.6	..
Miscellaneous	84.3	171.2	242.1	158.9	104.7	35.2	31.1	42.1	26.0	..
Public Utilities	103.2	138.1	217.2	178.9	146.8	56.2	41.6	29.0	36.3	21.4
Construction	123.2	140.2	161.7	168.5	144.4	62.5	46.9	60.4	27.8	-2.2
Services	*138.0*	*116.0*	*190.3*	*190.5*	*110.2*	*41.5*	*31.8*	*43.8*	*31.6*	*7.2*
Trade	119.7	174.5	233.2	165.4	91.3	36.8	9.7	38.6	25.4	-3.7
Hotels & Restaurants	105.0	147.7	216.3	168.1	130.5	45.4	24.6	41.8	26.0	10.3
Transport & Communication	107.1	144.8	197.5	202.5	133.3	65.4	33.7	44.3	25.1	5.6
Road	86.1	146.3	178.5	195.2	132.4	62.9	34.1	45.5	28.2	5.1
Rail	267.0	65.1	180.2	327.0	127.3	36.2	16.3	29.6	11.4	19.1
Air	182.8	218.9	264.7	131.5	129.1	65.6	24.6	65.3	18.5	2.7
Communication	59.6	209.5	684.4	352.2	164.7	122.5	51.8	27.3	14.6	7.3
General Government	245.9	6.4	24.6	481.9	90.3	14.0	83.3	82.3	38.8	20.3
Education	154.5	90.7	135.1	206.8	140.5	43.9	51.5	37.9	68.4	26.4
Health	119.0	123.2	177.6	168.2	128.9	52.8	80.7	54.2	38.4	1.3
Rents	104.9	148.1	216.5	168.0	130.5	45.4	51.9	36.6	27.1	8.2
Owner-Occupied Dwellings	105.3	148.0	216.4	168.0	130.5	45.4	51.9	36.6	27.1	8.2
Miscellaneous	105.6	147.8	216.6	168.0	130.5	45.4	24.4	42.0	25.1	8.8
GDP at Factor Cost	*109.0*	*124.9*	*181.6*	*187.9*	*115.6*	*43.1*	*25.5*	*46.7*	*29.9*	*5.8*
o/w Non-Monetary	114.3	157.6	195.2	189.2	117.4	46.8	19.4	49.0	27.2	3.2
Indirect Taxes	114.3	98.9	57.2	202.7	107.7	97.3	56.1	34.9	45.1	22.4
GDP at Market Prices	*109.2*	*122.9*	*174.1*	*187.3*	*115.1*	*45.4*	*27.2*	*45.9*	*30.7*	*6.9*

Source: Statistics Department, MFEP.

GDP BY EXPENDITURE IN CURRENT PRICES **TABLE II.8**
In Millions of Ugandan Shillings

	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Consumption	7,971	17,200	42,528	128,459	396,264	937,975	1,454,647	1,897,177	2,896,806	4,013,877	4,602,803
Private	7,025	14,589	37,714	119,074	363,532	865,040	1,313,317	1,703,138	2,502,683	3,518,868	4,044,364
Public	946	2,611	4,814	9,385	32,732	72,935	141,330	194,039	394,123	495,009	558,439
Gross Domestic Investment	651	1,524	3,434	11,748	40,345	92,631	165,237	273,376	423,837	557,882	573,163
Fixed Capital Formation	659	1,488	3,433	11,540	40,230	94,829	166,111	267,077	425,985	548,766	570,362
Private	233	746	2,529	8,434	25,530	71,303	108,637	162,013	230,002	252,299	250,008
Public	426	742	905	3,107	14,700	23,526	57,474	105,064	195,984	296,468	320,354
Net Changes in Stocks	-8	36	1	208	115	-2,198	-874	6,299	-2,148	9,116	2,801
Gross Domestic Expenditure	8,622	18,724	45,962	140,207	436,609	1,030,606	1,619,884	2,170,553	3,320,643	4,571,759	5,175,966
Resource Balance	-95	-184	-1,003	-12,724	-40,221	-82,124	-151,302	-278,095	-438,314	-605,652	-522,781
Exports GNFS	998	2,317	5,014	8,369	23,776	60,493	83,120	112,600	199,212	216,017	271,702
Imports GNFS	1,093	2,501	6,017	21,093	63,997	142,617	234,422	390,695	637,526	821,669	794,483
Statistical Discrepancy	1,302	1,405	-627	-1,364	-2,873	-48,765	-81,109	-44,376	-99,812	-18,517	-204,375
GDP at Market Prices	*9,829*	*19,945*	*44,332*	*126,119*	*393,515*	*899,717*	*1,387,473*	*1,848,082*	*2,782,517*	*3,947,590*	*4,448,810*
GNP	*9,719*	*19,676*	*43,855*	*125,188*	*390,095*	*888,471*	*1,362,863*	*1,816,020*	*2,698,927*	*3,888,822*	*4,382,222*
Net Factor Service Income	-110	-269	-477	-931	-3,420	-11,246	-24,610	-32,062	-83,590	-58,768	-66,588
Net Current Transfers	61	203	1,096	1,984	7,200	19,426	24,930	44,347	130,573	289,634	332,940
Gross Domestic Savings	556	1,340	2,431	-976	124	10,507	13,935	-4,719	-14,477	-47,770	50,382
Private	155	1,028	2,538	-387	-24	17,723	9,148	-29,600	32,452	-75,132	13,390
Public	401	312	-108	-589	148	-7,216	4,786	24,881	-46,929	27,362	36,992
Gross National Savings	507	1,274	3,049	77	3,904	18,686	14,254	7,566	32,506	183,095	316,734
Private	272	1,220	3,721	1,166	6,056	31,702	18,025	1,341	169,528	225,119	343,420
Public	235	54	-672	-1,089	-2,152	-13,016	-3,771	6,225	-137,022	-42,024	-26,686
Memorandum Items:											
Population (Millions)	13.9	14.2	14.5	14.9	15.3	15.7	16.2	16.7	17.1	17.8	18.3
Exchange Rate (U Sh/US$)	2	5	11	20	60	170	320	551	961	1202	1097
GDP in Current US$ m	4,200	3,926	4,086	6,370	6,559	5,280	4,341	3,355	2,896	3,285	4,055

Sources: Statistics Department, MFEP, and staff estimates.

GDP BY EXPENDITURE IN CONSTANT 1991 PRICES **TABLE II.9**
In Millions of Ugandan Shillings

	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Consumption	1,709,642	1,677,076	1,711,407	1,761,240	1,874,144	1,991,133	2,108,219	2,176,952	2,276,676	2,387,857	2,460,688
Private	1,527,772	1,500,309	1,533,725	1,576,949	1,684,364	1,796,277	1,887,920	1,963,007	2,011,444	2,151,839	2,212,815
Public	181,870	176,767	177,682	184,291	189,780	194,856	220,299	213,945	265,232	236,018	247,873
Gross Domestic Investment	206,447	200,567	204,078	284,875	344,486	315,204	325,757	352,230	327,838	340,982	367,624
Fixed Capital Formation	204,061	199,055	204,010	279,667	342,548	324,796	329,236	342,473	329,728	331,866	364,612
Private	96,426	100,736	147,098	182,916	191,563	239,975	213,960	208,051	178,508	151,949	155,701
Public	107,635	98,319	56,912	96,751	150,985	84,821	115,276	134,422	151,220	179,917	208,911
Net Changes in Stocks	2,386	1,512	68	5,208	1,938	-9,592	-3,479	9,757	-1,890	9,116	3,012
Gross Domestic Expenditure	1,916,089	1,877,643	1,915,485	2,046,115	2,218,630	2,306,337	2,433,976	2,529,182	2,604,514	2,728,839	2,828,312
Resource Balance	-245,845	-245,725	-256,550	-342,251	-385,454	-369,542	-346,012	-362,514	-325,031	-381,733	-320,598
Exports GNFS	137,264	133,542	134,781	130,001	133,485	142,562	150,708	138,538	162,249	149,782	219,043
Imports GNFS	383,109	379,267	391,331	472,252	518,939	512,104	496,720	501,052	487,280	531,515	539,641
Statistical Discrepancy	16,671	4,020	-27,471	-10,581	5,739	17,773	-14,748	4,153	-39,741	83,402	53,826
GDP at Market Prices	*1,686,915*	*1,635,938*	*1,631,464*	*1,693,283*	*1,838,915*	*1,954,568*	*2,073,216*	*2,170,821*	*2,239,742*	*2,430,508*	*2,561,540*
Terms of Trade Adjustment	212,611	217,806	191,301	57,369	59,311	74,654	25,416	5,867	-9,985	-10,047	-34,494
Import Capacity	349,875	351,348	326,082	187,370	192,796	217,216	176,124	144,405	152,264	139,735	184,550
Net Factor Service Income	-38,537	-40,824	-31,048	-20,835	-27,732	-40,383	-52,146	-41,119	-63,890	-38,015	-45,229
Net Current Transfers	21,318	30,811	71,268	44,422	58,384	69,753	52,824	56,874	99,801	187,356	226,144
GNP	*1,648,378*	*1,595,114*	*1,600,416*	*1,672,448*	*1,811,183*	*1,914,185*	*2,021,070*	*2,129,702*	*2,175,852*	*2,392,493*	*2,516,311*
Gross Domestic Savings	173,213	172,648	138,829	-7	18,343	20,316	5,161	-4,417	-7,178	-50,798	12,532
Gross National Savings	155,994	162,635	179,050	23,580	48,994	49,685	5,838	11,338	28,732	98,543	193,448
Gross Domestic Income	1,899,526	1,853,744	1,822,765	1,750,652	1,898,226	2,029,222	2,098,632	2,176,688	2,229,757	2,420,461	2,527,046
Gross National Income	1,860,989	1,812,920	1,791,718	1,729,817	1,870,493	1,988,839	2,046,485	2,135,569	2,165,867	2,382,446	2,481,818
Memorandum Items:											
Import Price Index (1991=100)	0.3	0.7	1.5	4.5	12.3	27.8	47.2	78.0	130.8	154.6	147.2
Export Price Index (1991=100)	0.7	1.7	3.7	6.4	17.8	42.4	55.2	81.3	122.8	144.2	124.0
Terms of Trade (1991=100)	9.0	263.1	241.9	144.1	144.4	152.4	116.9	104.2	93.8	93.3	84.3

Sources: Statistics Department, MFEP, and staff estimates.

GDP BY EXPENDITURE IN CURRENT PRICES **TABLE II.10**
As a Percentage of GDP at Market Prices

	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Consumption	81.1	86.2	95.9	101.9	100.7	104.3	104.8	102.7	104.1	101.7	103.5
Private	71.5	73.1	85.1	94.4	92.4	96.1	94.7	92.2	89.9	89.1	90.9
Public	9.6	13.1	10.9	7.4	8.3	8.1	10.2	10.5	14.2	12.5	12.6
Gross Domestic Investment	6.6	7.6	7.7	9.3	10.3	10.3	11.9	14.8	15.2	14.1	12.9
Fixed Capital Formation	6.7	7.5	7.7	9.2	10.2	10.5	12.0	14.5	15.3	13.9	12.8
Private	2.4	3.7	5.7	6.7	6.5	7.9	7.8	8.8	8.3	6.4	5.6
Public	4.3	3.7	2.0	2.5	3.7	2.6	4.1	5.7	7.0	7.5	7.2
Net Changes in Stocks	-0.1	0.2	0.0	0.2	0.0	-0.2	-0.1	0.3	-0.1	0.2	0.1
Gross Domestic Expenditure	87.7	93.9	103.7	111.2	111.0	114.5	116.8	117.4	119.3	115.8	116.3
Resource Balance	-1.0	-0.9	-2.3	-10.1	-10.2	-9.1	-10.9	-15.0	-15.8	-15.3	-11.8
Exports GNFS	10.2	11.6	11.3	6.6	6.0	6.7	6.0	6.1	7.2	5.5	6.1
Imports GNFS	11.1	12.5	13.6	16.7	16.3	15.9	16.9	21.1	22.9	20.8	17.9
Statistical Discrepancy	13.2	7.0	-1.4	-1.1	-0.7	-5.4	-5.8	-2.4	-3.6	-0.5	-4.6
GDP at Market Prices	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
GNP	*98.9*	*98.7*	*98.9*	*99.3*	*99.1*	*98.8*	*98.2*	*98.3*	*97.0*	*98.5*	*98.5*
Net Factor Service Income	-1.1	-1.3	-1.1	-0.7	-0.9	-1.2	-1.8	-1.7	-3.0	-1.5	-1.5
Net Current Transfers	0.6	1.0	2.5	1.6	1.8	2.2	1.8	2.4	4.7	7.3	7.5
Gross Domestic Savings	5.7	6.7	5.5	-0.8	0.0	1.2	1.0	-0.3	-0.5	-1.2	1.1
Private	1.6	5.2	5.7	-0.3	0.0	2.0	0.7	-1.6	1.2	-1.9	0.3
Public	4.1	1.6	-0.2	-0.5	0.0	-0.8	0.3	1.3	-1.7	0.7	0.8
Gross National Savings	5.2	6.4	6.9	0.1	1.0	2.1	1.0	0.4	1.2	4.6	7.1
Private	2.8	6.1	8.4	0.9	1.5	3.5	1.3	0.1	6.1	5.7	7.7
Public	2.4	0.3	-1.5	-0.9	-0.5	-1.4	-0.3	0.3	-4.9	-1.1	-0.6

Sources: Statistics Department, MFEP, and staff estimates.

GDP BY EXPENDITURE IN CONSTANT 1991 PRICES **TABLE II.11**

Annual Percentage Growth Rates

	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Consumption	-1.9	2.0	2.9	6.4	6.2	5.9	3.3	4.6	4.9	3.1
Private	-1.8	2.2	2.8	6.8	6.6	5.1	4.0	2.5	7.0	2.8
Public	-2.8	0.5	3.7	3.0	2.7	13.1	-2.9	24.0	-11.0	5.0
Gross Domestic Investment	-2.8	1.8	39.6	20.9	-8.5	3.3	8.1	-6.9	4.0	7.8
Fixed Capital Formation	-2.5	2.5	37.1	22.5	-5.2	1.4	4.0	-3.7	0.6	9.9
Private	4.5	46.0	24.3	4.7	25.3	-10.8	-2.8	-14.2	-14.9	2.5
Public	-8.7	-42.1	70.0	56.1	-43.8	35.9	16.6	12.5	19.0	16.1
Gross Domestic Expenditure	-2.0	2.0	6.8	8.4	4.0	5.5	3.9	3.0	4.8	3.6
Resource Balance	0.0	4.4	33.4	12.6	-4.1	-6.4	4.8	-10.3	17.4	-16.0
Exports GNFS	-2.7	0.9	-3.5	2.7	6.8	5.7	-8.1	17.1	-7.7	46.2
Imports GNFS	-1.0	3.2	20.7	9.9	-1.3	-3.0	0.9	-2.7	9.1	1.5
GDP at Market Prices	*-3.0*	*-0.3*	*3.8*	*8.6*	*6.3*	*6.1*	*4.7*	*3.2*	*8.5*	*5.4*
Terms of Trade Adjustment	2.4	-12.2	-70.0	3.4	25.9	-66.0	-76.9	-270.2	0.6	243.3
Import Capacity	0.4	-7.2	-42.5	2.9	12.7	-18.9	-18.0	5.4	-8.2	32.1
Net Factor Service Income	5.9	-23.9	-32.9	33.1	45.6	29.1	-21.1	55.4	-40.5	19.0
Net Current Transfers	44.5	131.3	-37.7	31.4	19.5	-24.3	7.7	75.5	87.7	20.7
GNP	*-3.2*	*0.3*	*4.5*	*8.3*	*5.7*	*5.6*	*5.4*	*2.2*	*10.0*	*5.2*
Gross Domestic Income	-2.4	-1.7	-4.0	8.4	6.9	3.4	3.7	2.4	8.6	4.4
Gross National Income	-2.6	-1.2	-3.5	8.1	6.3	2.9	4.4	1.4	10.0	4.2
Current Account Balance	-2.8	-15.4	47.3	11.3	-4.1	1.5	0.4	-16.6	-19.6	-39.9

Sources: Statistics Department, MFEP, and staff estimates.

GDP BY EXPENDITURE IN CONSTANT 1991 PRICES **TABLE II.12**

As a Percentage of GDP at Market Prices

	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Consumption	101.3	102.5	104.9	104.0	101.9	101.9	101.7	100.3	101.6	98.2	96.1
Private	90.6	91.7	94.0	93.1	91.6	91.9	91.1	90.4	89.8	88.5	86.4
Public	10.8	10.8	10.9	10.9	10.3	10.0	10.6	9.9	11.8	9.7	9.7
Gross Domestic Investment	12.2	12.3	12.5	16.8	18.7	16.1	15.7	16.2	14.6	14.0	14.4
Fixed Capital Formation	12.1	12.2	12.5	16.5	18.6	16.6	15.9	15.8	14.7	13.7	14.2
Private	5.7	6.2	9.0	10.8	10.4	12.3	10.3	9.6	8.0	6.3	6.1
Public	6.4	6.0	3.5	5.7	8.2	4.3	5.6	6.2	6.8	7.4	8.2
Net Changes in Stocks	0.1	0.1	0.0	0.3	0.1	-0.5	-0.2	0.4	-0.1	0.4	0.1
Gross Domestic Expenditure	113.6	114.8	117.4	120.8	120.6	118.0	117.4	116.5	116.3	112.3	110.4
Resource Balance	-14.6	-15.0	-15.7	-20.2	-21.0	-18.9	-16.7	-16.7	-14.5	-15.7	-12.5
Exports GNFS	8.1	8.2	8.3	7.7	7.3	7.3	7.3	6.4	7.2	6.2	8.6
Imports GNFS	22.7	23.2	24.0	27.9	28.2	26.2	24.0	23.1	21.8	21.9	21.1
Statistical Discrepancy	1.0	0.2	-1.7	-0.6	0.3	0.9	-0.7	0.2	-1.8	3.4	2.1
GDP at Market Prices	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Terms of Trade Adjustment	12.6	13.3	11.7	3.4	3.2	3.8	1.2	0.3	-0.4	-0.4	-1.3
Import Capacity	20.7	21.5	20.0	11.1	10.5	11.1	8.5	6.7	6.8	5.7	7.2
Net Factor Service Income	-2.3	-2.5	-1.9	-1.2	-1.5	-2.1	-2.5	-1.9	-2.9	-1.6	-1.8
Net Current Transfers	1.3	1.9	4.4	2.6	3.2	3.6	2.5	2.6	4.5	7.7	8.8
GNP	*97.7*	*97.5*	*98.1*	*98.8*	*98.5*	*97.9*	*97.5*	*98.1*	*97.1*	*98.4*	*98.2*
Gross Domestic Savings	10.3	10.6	8.5	0.0	1.0	1.0	0.2	-0.2	-0.3	-2.1	0.5
Gross National Savings	9.2	9.9	11.0	1.4	2.7	2.5	0.3	0.5	1.3	4.1	7.6
Gross Domestic Income	112.6	113.3	111.7	103.4	103.2	103.8	101.2	100.3	99.6	99.6	98.7
Gross National Income	110.3	110.8	109.8	102.2	101.7	101.8	98.7	98.4	96.7	98.0	96.9

Sources: Statistics Department, MFEP, and staff estimates.

BALANCE OF PAYMENTS
In Millions of US Dollars

TABLE III.1

	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Exports GNFS	402.0	408.0	389.0	406.0	323.9	304.0	245.7	198.9	195.1	206.2	333.1
Merchandise, fob	378.0	383.0	379.0	384.0	297.9	282.0	210.0	175.5	172.1	157.1	253.9
o/w Coffee	342.0	353.0	360.0	365.0	285.9	276.0	159.0	127.0	116.9	99.1	172.3
Non-Factor Services	24.0	25.0	10.0	22.0	26.0	22.0	35.7	23.4	23.0	49.1	79.2
Imports GNFS	450.0	484.0	446.0	600.0	682.0	712.0	675.8	670.5	581.6	753.4	893.4
Merchandise, cif	368.0	404.0	380.0	514.0	545.0	562.0	584.0	545.0	450.6	573.2	717.7
o/w Petrol	91.0	76.0	61.0	63.0	69.0	76.0	78.0	87.0	57.0	53.2	64.4
Non-Factor Services	82.0	80.0	66.0	86.0	137.0	150.0	91.8	125.5	131.0	180.2	175.7
Resource Balance	-48.0	-76.0	-57.0	-194.0	-358.1	-408.0	-430.1	-471.6	-386.5	-547.3	-560.2
Net Factor Income	-47.0	-53.0	-44.0	-47.0	-57.0	-66.0	-77.0	-58.2	-87.0	-48.9	-60.7
o/w Net Interest	-47.0	-53.0	-44.0	-47.0	-57.0	-66.0	-77.0	-58.2	-87.0	-48.9	-42.9
Current Private Transfers	26.0	40.0	101.0	100.2	120.0	114.0	78.0	80.5	135.9	241.0	303.5
C/A Balance (excl Grants)	*-69.0*	*-89.0*	*0.0*	*-140.8*	*-295.1*	*-360.0*	*-429.1*	*-449.3*	*-337.6*	*-355.2*	*-317.4*
C/A Balance (incl Grants)	*2.0*	*-25.0*	*31.0*	*-100.7*	*-202.7*	*-229.0*	*-276.4*	*-187.4*	*-131.5*	*-96.3*	*-67.0*
Official Transfers	71.0	64.0	31.0	40.1	92.4	131.0	152.7	261.9	206.1	258.9	250.4
o/w Import Support	0.0	0.0	0.0	0.0	33.5	49.3	28.8	86.7	75.1	111.4	75.5
o/w Project Aid	71.0	64.0	31.0	40.1	58.9	81.7	123.9	175.2	131.0	147.5	175.0
Net M&LT Loans	-5.0	43.0	12.0	45.0	101.0	125.0	215.3	121.9	38.0	127.4	178.8
Disbursements	81.0	120.0	88.0	135.0	186.0	211.0	292.3	214.1	163.4	231.5	294.2
Project Loans	81.0	115.0	88.0	135.0	141.0	143.0	125.3	115.4	94.2	147.5	176.0
Import Support Loans	0.0	5.0	0.0	0.0	45.0	68.0	167.0	98.7	69.2	83.9	118.2
Repayments	86.0	77.0	76.0	90.0	85.0	86.0	77.0	92.2	125.4	104.1	115.4
Foreign Investment/Kenya Comp.	0.0	30.0	29.0	28.0	10.0	13.0	5.5	1.0	2.0	4.0	4.6
Short-Term, net	64.0	-15.0	1.0	-31.0	37.0	-17.4	11.5	-36.8	-31.0	-22.2	-54.7
Errors and Omissions	12.0	12.0	-49.0	-20.0	-10.0	6.5	0.0	0.0	1.4	-21.1	47.8
Overall Balance	*73.0*	*45.0*	*24.0*	*-78.7*	*-64.7*	*-101.9*	*-44.1*	*-101.3*	*-121.1*	*-8.2*	*109.5*

Continued

BALANCE OF PAYMENTS **TABLE III.1**

In Millions of US Dollars

	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Financing:	*-73.0*	*-45.0*	*-24.0*	*78.7*	*64.7*	*101.9*	*44.1*	*101.3*	*121.1*	*8.2*	*-109.5*
Monetary Authorities	-52.0	-39.0	-39.0	22.0	-14.0	18.0	10.0	37.0	-1.8	-28.7	-89.7
Gross Reserve Changes	-81.0	32.0	-1.0	33.0	-4.0	11.5	11.0	-14.9	-23.8	-38.4	-107.4
IMF, net	39.0	-70.0	-35.0	-3.0	-17.0	6.5	-1.0	51.9	22.0	9.7	17.7
SAF/ESAF and Purchases	69.0	0.0	0.0	57.0	34.0	94.0	42.0	89.0	55.0	28.0	27.5
Other, net	-10.0	-1.0	-3.0	-8.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0
Short Term/Commercial	0.0	0.0	-4.5	10.0	-9.5	6.0	12.0	-2.0	-3.7	-3.5	0.0
Change in External Arrears	-63.0	-59.0	19.4	-45.0	47.4	18.0	-19.0	65.0	98.2	-329.7	-58.8
Exceptional Financing	42.0	53.0	0.1	91.7	40.8	59.9	41.1	1.3	28.4	370.1	39.1
Rescheduling/Cancellation	42.0	53.0	0.1	91.7	40.8	60.9	41.1	1.3	28.4	370.1	39.1
Towards Arrears Reduction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	28.4	331.5	22.7
Towards Current Maturities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.6	16.5
Residual Finance Gap	0.0	0.0	0.0	0.0	0.0	-1.0	0.0	0.0	0.0	0.0	0.0
Memo Item:											
Gross Reserves (EOP)	117	85	86	53	57	46	35	50	73	112	219
In Months of Imports GNFS	3.1	2.1	2.3	1.1	1.0	0.8	0.6	0.9	1.5	1.8	2.9

Sources: BOU and IMF.

Note: Before 1992/93 imports were derived from financing items; as of 1992/93 customs data were used in calculating imports.

INCONSISTENCIES IN EXPORT DATA FROM ALTERNATIVE SOURCES
In Millions of US Dollars

TABLE III.2

	Traditional Exports					
	Coffee		*Tea*		*Tobacco*	
	BOU	MFEP	BOU	MFEP	BOU	MFEP
1989	103.0	262.8	1.2	3.2	0.6	0.6
1990	139.6	140.4	2.9	3.6	2.9	2.8
1991	100.7	117.6	5.3	6.8	4.5	4.5
1992	93.0	95.1	5.7	7.7	4.2	4.4

	Non-Traditional Exports					
	Cereals		*Fish & Fish Products*		*Cocoa*	
	BOU	MFEP	BOU	MFEP	BOU	MFEP
1989	0.2	0.0	0.7	0.1	0.0	0.7
1990	3.3	3.3	1.2	1.2	0.5	0.6
1991	3.9	4.4	5.0	5.5	0.4	0.5
1992	3.9	4.7	5.8	5.5	0.3	0.2

Sources: BOU = Bank of Uganda, Quarterly Economic Report, 1988-93.
MFEP = Ministry of Finance and Economic Planning, Background to the Budget, 1994-95.

EXTERNAL DEBT OUTSTANDING **TABLE IV.1**
In Millions of US Dollars

	1991 June	1992 June	1993 June	1994 June	1994 Dec
Multilateral Institutions	1,644	1,755	1,843	2,150	2,284
African Development Bank	91	59	50	28	28
African Development Fund	18	139	142	197	197
BADEA	18	18	18	15	14
European Investment Bank	16	19	17	21	25
IBRD	28	24	22	18	16
IDA	957	1,043	1,152	1,418	1,533
Islamic Development Bank	19	21	22	16	14
IFAD	30	33	38	44	46
IMF	282	330	344	361	383
Other	185	69	39	32	28
Bilateral Paris Club	285	273	282	332	343
Pre-cutoff date	..	161	171	176	181
Post-cutoff date	..	113	110	156	162
Bilateral Non-Paris Club	526	378	381	398	424
China	48	61	59	65	66
India	62	61	54	51	54
Libya	84	87	90	98	111
Tanzania	131	71	68	68	68
Korea, DPR of	38	34	34	34	35
Other	163	65	77	82	91
Commercial Banks	40	15	14	1	1
Commercial Non-Banks	96	225	61	38	39
Other	0	0	101	73	78
Total DOD including Arrears	2,592	2,647	2,682	2,993	3,170

Source: IMF staff estimates based on data provided by the Ugandan authorities.

Note: Arrears include principal and interest in arrears.
The above data may not necessarily correspond to the statistics reported by the World Bank's Debtor Reporting System. Owing to differences in the classification of certain creditors, this table may not correspond to other debt tables in this report.

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ARREARS
In Millions of US Dollars

TABLE IV.2

	1991 June	1992 June	1993 June	1994 June	1994 Dec
Multilateral Institutions	52.0	59.1	19.3	0.0	0.0
World Bank	..	..	..	..	..
IMF	..	..	..	..	..
African Development Bank	..	..	..	..	..
Islamic Development Bank	0.4	8.9	..	..	..
European Investment Bank	2.2	1.5	1.2	..	..
East African Development Bank	45.3	48.1	15.3	..	..
Other	4.1	0.6	2.8	..	..
Bilateral Paris Club	65.2	107.9	5.6	0.0	0.0
France	31.8	47.4	..	..	..
Italy	12.3	17.7	..	..	..
United Kingdom	5.0	9.8	..	..	..
Germany	..	1.7	..	..	..
United States	2.1	0.6	..	..	..
Spain	1.0	1.5	..	..	..
Japan	0.5	5.1	5.6	..	..
Israel	..	24.0	..	..	..
Other	12.5	0.0	..	..	..
Bilateral Non-Paris Club	122.1	197.6	132.6	143.4	152.4
Abu Dhabi	1.4	2.3	3.1	3.8	4.0
China	11.9	28.7	3.3	3.3	4.4
India	50.0	52.2	..	..	..
Kuwait	0.9	0.4	..	..	..
Iraq	3.4	3.5	3.5	2.9	2.9
Cuba	0.3	1.3	0.2	..	..
Former USSR	33.4	..	..	..	..
Yugoslavia	9.0	13.8	22.6	29.0	31.1
Libya	3.2	8.7	14.5	25.3	30.8
Saudi Arabia	1.3	..	..	..	..
Pakistan	1.4	2.0	2.7	3.4	3.5
Burundi	5.4	4.9	3.6	3.4	3.4
Korea, DPR of	0.4	4.4	7.5	..	..
Tanzania	0.1	71.2	67.6	67.5	67.5
Nigeria	..	..	0.3	0.9	0.9
Egypt	..	4.2	3.8	3.8	3.8
Other	..	..	0.1	..	0.1
Suppliers Credits and Banks	138.4	244.6	122.3	77.5	82.7
IFC	4.1	6.9	6.9	10.0	10.1
CDC	10.1	16.6	15.8	21.1	25.4
EADB	..	..	33.6	..	..
Other	124.2	221.1	66.0	46.4	47.3
Total - Principal and Interest	377.7	609.2	279.8	220.9	235.1

Source: IMF staff estimates based on data provided by the Ugandan authorities.

CENTRAL GOVERNMENT OPERATIONS **TABLE V.1**
In Millions of Ugandan Shillings

	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Total Revenue	930	1,622	2,846	5,811	22,548	47,854	94,525	136,808	185,995	281,428	363,881
Tax Revenue	869	1,595	2,791	4,835	19,697	40,423	86,555	128,211	173,654	259,024	338,818
o/w Coffee	412	942	1,891	1,996	6,299	5,370	14,931	12,730	2,005 ..		..
Non-Tax Revenue	61	27	55	976	2,851	7,431	7,970	8,597	12,340	22,404	25,063
Total Expenditure	1,153	2,397	4,723	11,042	44,300	91,596	174,928	269,168	581,495	718,342	816,772
Current Expenditure	695	1,568	3,517	6,900	24,700	60,870	98,296	130,583	323,017	323,452	390,567
Wages & Salaries	126	440	535	1,200	3,700	9,778	12,973	24,132	47,846	62,691	84,427
Interest Payments	166	258	564	500	2,300	5,800	8,557	18,656	90,093	69,386	63,678
External	..	..	..	..	..	5,200	7,601	17,464	81,249	56,555	54,932
Domestic	..	..	..	..	..	600	956	1,192	8,844	12,831	8,746
Other	404	870	2,418	5,200	18,700	45,292	76,766	87,795	185,078	191,375	242,462
Net Lending/Investment	330	480	0	0	0	1,926	0	4,500	8,500	1,200	2,800
Capital Expenditure	128	349	1,206	4,142	19,600	28,800	76,632	134,085	249,978	393,690	423,405
External	97	262	496	2,307	11,800	18,037	42,804	82,015	213,272	357,926	383,600
Domestic Counterpart	31	87	710	1,835	2,500	4,105	5,816	9,855	13,981	35,764	39,805
Local Capital	..	..	..	..	5,300	6,658	28,012	42,215	22,725	..	..
Overall Deficit (Commitment)	-223	-775	-1,878	-5,231	-21,752	-43,742	-80,403	-132,360	-395,500	-436,914	-452,891
Change in Arrears, net	-84	63	0	-30	-1,248	-3,222	-9,441	-12,385	2,491	-72,868	-65,265
External	..	..	..	..	..	..	..	..	-5,226	-38,170	-40,552
Domestic	..	..	..	..	..	..	..	..	7,717	-34,698	-24,713
Adjustment to Cash	..	..	..	..	..	..	..	..	..	19,038	100
Overall Deficit (Cash)	*-307*	*-712*	*-1,878*	*-5,261*	*-23,000*	*-46,964*	*-89,844*	*-144,745*	*-393,009*	*-490,744*	*-518,056*
Financing:	*307*	*712*	*1,878*	*5,261*	*23,000*	*46,964*	*89,844*	*144,746*	*393,010*	*490,744*	*518,055*
Budgetary Grants	45	78	504	562	6,500	14,160	20,296	70,185	194,644	313,754	287,542
External, net	30	96	432	400	8,700	19,404	91,815	65,152	142,339	200,816	257,475
Borrowing	179	492	1,136	1,700	11,200	22,204	75,641	96,623	131,605	232,077	339,763
Repayment	149	396	704	1,300	4,900	13,600	28,355	58,361	123,839	125,538	114,653
Debt Relief less Moratorium Int.	0	0	0	0	2,400	10,800	44,529	26,890	134,573	74,277	32,365
Domestic	232	538	942	4,299	7,800	13,400	-22,267	9,409	56,027	-23,826	-26,962
Bank	-29	555	573	4,699	7,800	12,300	-19,325	3,700	51,391	-17,291	-36,700
Non-Bank	261	-17	369	-400	0	1,100	-2,942	5,709	4,636	-6,535	9,738

Sources: MFEP, Statistics Department and IMF.

CENTRAL GOVERNMENT OPERATIONS **TABLE V.2**
As a Percentage of GDP at MP

	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Total Revenue	9.5	8.1	6.4	4.6	5.7	5.3	6.8	7.4	6.7	7.1	8.2
Tax Revenue	8.8	8.0	6.3	3.8	5.0	4.5	6.2	6.9	6.2	6.6	7.6
o/w Coffee	4.2	4.7	4.3	1.6	1.6	0.6	1.1	0.7	0.1	..	..
Non-Tax Revenue	0.6	0.1	0.1	0.8	0.7	0.8	0.6	0.5	0.4	0.6	0.6
Total Expenditure	11.7	12.0	10.7	8.8	11.3	10.2	12.6	14.6	20.9	18.2	18.4
Current Expenditure	7.1	7.9	7.9	5.5	6.3	6.8	7.1	7.1	11.6	8.2	8.8
Wages & Salaries	1.3	2.2	1.2	1.0	0.9	1.1	0.9	1.3	1.7	1.6	1.9
Interest Payments	1.7	1.3	1.3	0.4	0.6	0.6	0.6	1.0	3.2	1.8	1.4
External	..	..	..	..	..	0.6	0.5	0.9	2.9	1.4	1.2
Domestic	..	..	..	..	..	0.1	0.1	0.1	0.3	0.3	0.2
Other	4.1	4.4	5.5	4.1	4.8	5.0	5.5	4.8	6.7	4.8	5.5
Net Lending/Investment	3.4	2.4	0.0	0.0	0.0	0.2	0.0	0.2	0.3	0.0	0.1
Capital Expenditure	1.3	1.7	2.7	3.3	5.0	3.2	5.5	7.3	9.0	10.0	9.5
External	1.0	1.3	1.1	1.8	3.0	2.0	3.1	4.4	7.7	9.1	8.6
Domestic Counterpart	0.3	0.4	1.6	1.5	0.6	0.5	0.4	0.5	0.5	0.9	0.9
Local Capital	..	..	..	..	1.3	0.7	2.0	2.3	0.8	..	..
Overall Deficit (Commitment)	-2.3	-3.9	-4.2	-4.1	-5.5	-4.9	-5.8	-7.2	-14.2	-11.1	-10.2
Change in Arrears, net	-0.9	0.3	0.0	0.0	-0.3	-0.4	-0.7	-0.7	0.1	-1.8	-1.5
External	..	..	..	..	..	..	..	..	-0.2	-1.0	-0.9
Domestic	..	..	..	..	..	..	..	..	0.3	-0.9	-0.6
Adjustment to Cash	..	..	..	..	..	..	..	..	..	0.5	0.0
Overall Deficit (Cash)	-3.1	-3.6	-4.2	-4.2	-5.8	-5.2	-6.5	-7.8	-14.1	-12.4	-11.6
Financing:	3.1	3.6	4.2	4.2	5.8	5.2	6.5	7.8	14.1	12.4	11.6
Budgetary Grants	0.5	0.4	1.1	0.4	1.7	1.6	1.5	3.8	7.0	7.9	6.5
External, net	0.3	0.5	1.0	0.3	2.2	2.2	6.6	3.5	5.1	5.1	5.8
Borrowing	1.8	2.5	2.6	1.3	2.8	2.5	5.5	5.2	4.7	6.4	7.6
Repayment	1.5	2.0	1.6	1.0	1.2	1.5	2.0	3.2	4.5	3.2	2.6
Debt Relief less Moratorium Int.	0.0	0.0	0.0	0.0	0.6	1.2	3.2	1.5	4.8	1.9	0.7
Domestic	2.4	2.7	2.1	3.4	2.0	1.5	-1.6	0.5	2.0	-0.6	-0.6
Bank	-0.3	2.8	1.3	3.7	2.0	1.4	-1.4	0.2	1.8	-0.4	-0.8
Non-Bank	2.7	-0.1	0.8	-0.3	0.0	0.1	-0.2	0.3	0.2	-0.2	0.2

Sources: MFEP, Statistics Department and IMF.

MONETARY SURVEY **TABLE VI.1**

In Billions of Ugandan Shillings

	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Foreign Assets, net	-0.8	-1.3	-2.4	-13.6	-18.7	-63.9	-89.1	-151.6	-271.0	-207.2	-76.1
Bank of Uganda	-0.9	-1.4	-2.7	-14.0	-19.7	-66.0	-93.4	-165.8	-313.1	-277.4	-148.5
Commercial Banks	0.1	0.1	0.3	0.4	1.0	2.1	4.3	14.3	42.1	70.2	72.4
Domestic Credit	0.9	2.0	3.4	8.2	24.2	68.5	79.7	120.7	190.4	208.7	200.5
Claims on Government, net	0.4	1.0	1.5	4.1	11.9	26.4	9.2	12.9	57.2	40.0	-12.5
o/w Bank of Uganda	..	..	..	4.0	12.2	11.5	10.9	14.3	..	..	..
Claims on Private Sector	0.4	1.0	1.9	4.1	12.3	42.1	70.5	107.8	133.2	168.7	213.0
Crop Financing	0.2	0.5	1.1	1.5	4.5	19.5	24.4	40.5	38.4	48.0	53.6
Other	0.2	0.5	0.8	2.6	7.8	22.6	46.1	67.3	94.8	120.7	159.4
Total Assets	*0.0*	*0.6*	*1.0*	*-5.4*	*5.5*	*4.6*	*-9.4*	*-30.8*	*-80.6*	*1.5*	*124.4*
Total Liabilities	*0.1*	*0.6*	*1.0*	*-5.4*	*5.5*	*4.6*	*-9.4*	*-30.8*	*-80.5*	*1.5*	*124.3*
Money incl FX Deposits, M3	..	..	..	..	..	..	..	..	237.0	338.0	448.7
Broad Money, M2	0.8	1.8	4.5	8.6	26.8	60.2	94.4	138.6	212.7	301.9	402.5
Money Supply, M1	0.6	1.6	3.9	7.6	24.2	54.3	81.4	116.1	166.5	221.9	292.5
Currency in Circulation	..	..	..	4.0	14.4	29.2	38.6	56.2	92.7	108.9	147.8
Demand Deposits	..	..	..	3.6	9.8	25.1	42.8	59.9	73.8	113.0	144.7
Quasi-Money	0.1	0.3	0.6	1.0	2.6	5.9	13.0	22.5	46.2	80.0	110.0
Other Deposits	..	..	..	..	..	..	..	..	24.3	36.1	46.2
Other Items, net	-0.7	-1.2	-3.5	-14.0	-21.3	-55.6	-103.9	-169.4	-317.4	-336.5	-324.4
o/w Currency Revaluation	-0.6	-1.4	-3.4	-14.1	-14.1	-43.2	..	..	..	-369.7	-331.9
Memorandum Items:											
M3/GDP							..	..	8.5	8.6	10.1
M2/GDP	7.7	9.1	10.2	6.8	6.8	6.7	6.8	7.5	7.6	7.6	9.0
Velocity (M2)	12.9	11.0	9.8	14.7	14.7	15.0	14.7	13.3	13.1	13.1	11.1
Change in M2	..	139.5	147.8	90.7	211.9	124.3	57.0	46.7	53.5	42.0	33.3
Change in M1	..	153.2	149.7	93.9	218.6	124.0	50.0	42.6	43.4	33.3	31.8

Sources: Bank of Uganda, IMF and Staff Estimates.

CHANGE IN MONETARY SURVEY
In Billions of Ugandan Shillings

TABLE VI.2

	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Foreign Assets, net	-0.51	-1.12	-11.17	-5.10	-45.20	-25.20	-62.45	-119.45	63.80	131.10
Bank of Uganda	-0.51	-1.29	-11.32	-5.74	-46.30	-27.33	-72.46	-147.27	35.70	128.90
Commercial Banks	0.00	0.17	0.15	0.64	1.10	2.13	10.01	27.82	28.10	2.20
Domestic Credit	1.10	1.49	4.76	16.02	44.25	11.18	41.07	69.67	18.30	-8.20
Claims on Government, net	0.55	0.57	2.56	7.83	14.48	-17.20	3.71	44.29	-17.20	-52.50
o/w Bank of Uganda	..	..	..	8.21	-0.75	-0.60	3.43	..	..	..
Claims on Private Sector	0.55	0.92	2.20	8.19	29.78	28.39	37.36	25.38	35.50	44.30
Crop Financing	0.31	0.61	0.37	3.03	14.94	4.92	16.14	-2.13	9.60	5.60
Other	0.24	0.31	1.83	5.16	14.84	23.47	21.23	27.51	25.90	38.70
Total Assets	*0.59*	*0.37*	*-6.41*	*10.92*	*-0.95*	*-14.02*	*-21.38*	*-49.78*	*82.10*	*122.90*
Total Liabilities	*0.59*	*0.37*	*-6.41*	*10.92*	*-0.96*	*-14.00*	*-21.38*	*-49.63*	*81.95*	*122.80*
Money incl FX Deposits, M3	..	..	..	..	..	..	..	..	101.05	110.70
Broad Money, M2	1.06	2.69	4.09	18.23	33.34	34.27	44.13	74.09	89.25	100.60
Money Supply, M1	0.95	2.35	3.68	16.62	30.04	27.15	34.67	50.43	55.40	70.60
Currency in Circulation	..	..	..	10.41	14.76	9.44	17.62	36.48	16.20	38.90
Demand Deposits	..	..	..	6.21	15.28	17.71	17.05	13.95	39.20	31.70
Quasi-Money	0.11	0.34	0.41	1.61	3.30	7.12	9.45	23.67	33.85	30.00
Other Deposits	..	..	..	..	..	..	..	..	11.80	10.10
Other Items, net	-0.47	-2.32	-10.50	-7.31	-34.30	-48.27	-65.50	-148.02	-19.10	12.10
o/w Currency Revaluation	-0.72	-2.01	-10.73	0.04	-29.15	..	..	..	..	37.80

Sources: Bank of Uganda, IMF and Staff Estimates.

MONETARY SURVEY **TABLE VI.3**
As a percent of GDP at MP

	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Foreign Assets, net	-8.14	-6.57	-5.48	-10.78	-4.75	-7.10	-6.42	-8.20	-9.74	-5.25	-1.71
Bank of Uganda	-8.95	-6.97	-6.05	-11.10	-5.02	-7.34	-6.73	-8.97	-11.25	-7.03	-3.34
Commercial Banks	0.81	0.40	0.56	0.32	0.26	0.24	0.31	0.77	1.51	1.78	1.63
Domestic Credit	8.65	9.78	7.76	6.50	6.15	7.61	5.74	6.53	6.84	5.29	4.51
Claims on Government, net	4.27	4.86	3.47	3.25	3.03	2.93	0.66	0.70	2.06	1.01	-0.28
o/w Bank of Uganda	..	..	..	3.17	3.10	1.27	0.78	0.77	..	..	..
Claims on Private Sector	4.37	4.91	4.29	3.25	3.12	4.68	5.08	5.83	4.79	4.27	4.79
Crop Financing	2.14	2.61	2.55	1.19	1.15	2.16	1.76	2.19	1.38	1.22	1.20
Other	2.24	2.31	1.74	2.06	1.97	2.51	3.32	3.64	3.41	3.06	3.58
Total Assets	*0.51*	*3.21*	*2.28*	*-4.28*	*1.40*	*0.51*	*-0.68*	*-1.67*	*-2.90*	*0.04*	*2.80*
Total Liabilities	*0.51*	*3.21*	*2.28*	*-4.28*	*1.40*	*0.51*	*-0.68*	*-1.67*	*-2.89*	*0.04*	*2.79*
Money incl FX Deposits, M3	..	..	..	..	..	..	..	..	8.52	8.56	10.09
Broad Money, M2	7.73	9.13	10.17	6.82	6.82	6.69	6.81	7.50	7.64	7.65	9.05
Money Supply, M1	6.31	7.87	8.84	6.03	6.15	6.03	5.87	6.28	5.98	5.62	6.57
Currency in Circulation	..	..	..	3.17	3.66	3.24	2.78	3.04	3.33	2.76	3.32
Demand Deposits	..	..	..	2.85	2.49	2.79	3.08	3.24	2.65	2.86	3.25
Quasi-Money	1.42	1.25	1.33	0.79	0.66	0.66	0.94	1.22	1.66	2.03	2.47
Other Deposits	..	..	..	..	..	..	..	..	0.87	0.91	1.04
Other Items, net	-7.22	-5.92	-7.89	-11.10	-5.42	-6.18	-7.49	-9.17	-11.41	-8.52	-7.29
o/w Currency Revaluation	-6.51	-6.82	-7.60	-11.18	-3.57	-4.80	..	..	..	-9.37	-7.46

Sources: Bank of Uganda, IMF and Staff Estimates.

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Calendar Year	Fiscal Year	Average Bureau Cash Mid-Rate *U Sh/US$*	Average Official (Interbank) Mid-Rate *U Sh/US$*	Premium Bureau/ Official *Percent*
1984		6	4	52.1
	1984/85	10	5	91.9
1985		17	7	145.1
	1985/86	30	11	165.6
1986		61	14	329.0
	1986/87	110	22	406.7
1987		164	45	266.3
	1987/88	285	60	375.7
1988		414	106	289.8
	1988/89	471	170	177.5
1989		569	222	156.2
	1989/90	662	320	106.9
1990		698	433	61.3
	1990/91	780	558	39.8
1991		935	750	24.7
	1991/92	1130	983	15.0
1992		1237	1145	8.0
	1992/93	1241	1202	3.2
1993		1217	1195	1.9
	1993/94	1130	1103	2.5
1994		1004	979	2.5
	1994/95	941	933	0.9

Source: Bank of Uganda.

Notes: Forex bureaus were legalized in July 1990.
The auction was introduced in January 1992, and abolished on November 1, 1993.
Beginning November 1993, the interbank mid-rate replaced the official mid-rate.

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COMMERCIAL BANK LOANS AND ADVANCES TO THE PRIVATE SECTOR BY TYPE

TABLE VI.5

	1991				1992				1993				1994			
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
Agriculture	25.01	25.92	29.49	31.86	30.06	25.31	33.17	32.87	37.40	36.36	34.50	44.10	49.06	46.89	52.70	52.20
o/w Crop finance	17.42	16.14	21.80	23.81	24.02	22.76	27.43	27.01	32.53	35.82	27.54	35.46	41.72	40.89	49.37	48.44
Trade & Commerce	26.24	30.23	30.43	34.83	39.00	44.78	54.64	59.39	63.25	78.75	74.52	77.20	89.53	85.39	90.36	93.59
Manufacturing	8.29	8.99	7.95	12.30	15.44	17.79	17.76	18.69	23.38	19.57	30.52	32.36	35.02	40.18	41.22	45.70
Transportation	5.27	6.14	7.93	5.68	7.10	6.68	6.99	7.48	5.52	7.80	7.92	9.25	7.66	8.91	7.37	8.18
Building & Construction	5.45	5.65	6.76	7.75	10.17	10.13	11.08	10.94	11.55	11.55	12.21	11.50	12.63	12.70	15.01	18.07
Others	0.08	0.10	0.17	0.27	0.09	0.10	0.16	0.18	0.20	0.65	0.17	0.29	0.29	0.31	0.42	0.42
Total	70.34	77.03	82.73	92.69	101.86	104.79	123.80	129.55	141.30	154.68	159.84	174.70	194.19	194.38	207.08	218.16
Agriculture	35.6	33.6	35.6	34.4	29.5	24.2	26.8	25.4	26.5	23.5	21.6	25.2	25.3	24.1	25.4	23.9
o/w Crop finance	24.8	21.0	26.4	25.7	23.6	21.7	22.2	20.8	23.0	23.2	17.2	20.3	21.5	21.0	23.8	22.2
Trade & Commerce	37.3	39.2	36.8	37.6	38.3	42.7	44.1	45.8	44.8	50.9	46.6	44.2	46.1	43.9	43.6	42.9
Manufacturing	11.8	11.7	9.6	13.3	15.2	17.0	14.3	14.4	16.5	12.7	19.1	18.5	18.0	20.7	19.9	20.9
Transportation	7.5	8.0	9.6	6.1	7.0	6.4	5.6	5.8	3.9	5.0	5.0	5.3	3.9	4.6	3.6	3.7
Building & Construction	7.7	7.3	8.2	8.4	10.0	9.7	8.9	8.4	8.2	7.5	7.6	6.6	6.5	6.5	7.2	8.3
Others	0.1	0.1	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.4	0.1	0.2	0.1	0.2	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Bank of Uganda in Background to the Budget, 1995-96.

INTEREST RATES

TABLE VI.6

	1990				1991				1992				1993				1994				1995	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	April	June	Dec.	Jan.	Mar.
Bank of Uganda																						
Ways and means	15.0	15.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	17.1	22.0	20.8	10.8	6.3	8.2	6.2
Rediscount rate	48.0	48.0	43.0	43.0	38.0	38.0	40.0	40.0	41.0	43.0	43.0	40.0	25.0	25.0	23.0	23.0	23.0	23.0	18.5	14.0	14.0	14.0
Bank rate to commercial banks	55.0	55.0	50.0	50.0	44.0	44.0	46.0	46.0	47.0	49.0	49.0	41.0	26.0	26.0	24.0	24.0	24.0	24.0	19.5	15.0	15.0	15.0
Treasury bills																						
35 days a/	38.0	38.0	34.0	34.0	29.0	29.0	35.0	35.0	36.0	40.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
63 days a/	40.0	40.0	36.0	36.0	30.0	30.0	36.0	36.0	37.0	40.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
91 days	43.0	43.0	39.0	39.0	31.0	31.0	37.0	37.0	38.0	39.4	43.4	30.1	22.9	23.8	22.8	17.1	22.0	20.0	10.8	6.3	8.2	6.2
180 Days													29.8	31.1	26.6	21.2	24.0	23.0	15.6	11.8	14.9	13.9
273 Days													29.4	29.4	30.8	22.0	25.0	25.0	18.6	12.7	15.6	14.7
364 Days																				14.8	16.0	15.8
Government stocks																						
1 year																						
5 years	45.0	45.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	42.0	42.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10 years	47.0	47.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	44.0	44.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
15 years	50.0	50.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	47.0	47.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Commercial banks																						
Deposit rates																						
Demand deposits	20.0	20.0	18.0	18.0	12.0	12.0	13.0	13.0	8.0	8.0	8.0	opt.	opt.	opt.	opt.	opt.	opt.	opt.	opt.	opt.	opt.	opt.
Savings deposits	33.0	33.0	30.0	30.0	28.0	28.0	32.0	32.0	33.0	35.0	34.4	21.1	13.9	14.8	13.5	8.1	13.0	11.0	2.0	2.7	2.7	n.a.
Time deposits																						
3-6 months	33.0	33.0	30.0	30.0	29.0	29.0	34.0	34.0	34.0	36.0	37.4	24.1	16.9	17.8	16.5	11.1	16.0	14.0	5.0	n.a.	n.a.	n.a.
7-12 months	35.0	35.0	32.0	32.0	30.0	30.0	35.0	35.0	36.0	38.0	38.4	25,1	17.9	18.8	17.5	12.1	17.0	15.0	6.0	7.0	7.0	n.a.
Minimum 1 year	37.0	37.0	33.0	33.0	31.0	31.0	36.0	36.0	37.0	39.0	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.
Lending rates																						
Agriculture	25-40	25-40	36.0	36.0	32.0	32.0	37.0	37.0	38.0	40.0	40.0	33.1	25.9	26.8	25.5	20.1	20.0	23.0	14.0	22.3	22.0	n.a.
Export & manufacturing b/									42.0	44.0	neg.	neg.	neg.	neg.	neg.	neg.	20.0	23.0	14.0	22.3	22.0	n.a.
Commerce	50.0	50.0	45.0	45.0	39.0	39.0	41.0	41.0	42.0	44.0	neg.	neg.	neg.	neg.	neg.	neg.	25.0	23.0	14.0	22.3	22.0	n.a.
Unsecured									42.0	44.0	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.

n.a. Not Applicable, these bills have not been offered for sale.
neg. Interest rate is negotiable.
opt. Interest rate is optional.
a/ After Nov 10, 1992, the rates are a reference rate based on the previous 4 weighted treasury bill auction average.
b/ Short-term commercial nature depending on maturities.

Source: Bank of Uganda.

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PRODUCTION OF PRINCIPAL MANUFACTURED COMMODITIES

TABLE VII.1

		Sugar	Beer	Soft Drinks	Cigarettes	Textiles	Cement	Electri-city	Laundry Soap
	Unit	*Tons*	*'000 Ltr*	*'000 Ltr*	*Million*	*'000 Sq M*	*Tons*	*'000 Kwh*	*Tons*
Annual									
1982		3,289	9,787	1,795	745.0	18,557	18,471	559,800	n.a.
1983		3,133	14,206	3,953	645.0	16,607	30,780	515,500	n.a.
1984		2,943	14,817	5,784	965.8	11,475	24,921	614,400	n.a.
1985		808	8,184	5,002	1,416.4	10,418	11,749	626,500	n.a.
1986		0	6,603	5,049	1,420.1	9,733	16,376	637,200	2,902
1987		0	16,484	5,875	1,434.8	10,465	15,904	618,087	15,508
1988		7,535	21,139	13,431	1,637.7	11,067	14,960	565,909	17,929
1989		15,859	19,516	16,178	1,585.9	11,589	17,378	659,971	26,872
1990		28,915	19,420	24,275	1,289.7	8,172	26,920	736,500	30,816
1991		42,456	19,529	25,982	1,688.2	8,901	27,138	782,518	33,283
1992		53,539	18,718	21,769	1,574.9	9,650	37,881	986,278	38,660
1993		49,264	23,881	26,899	1,412.5	7,481	51,985	974,677	47,588
Monthly									
1989	Jan	1,603	2,428	876	110.8	375	477	41,512	2,469
	Feb	1,264	1,592	1,215	132.4	988	325	45,549	2,264
	Mar	775	2,382	1,385	149.3	1,066	2,109	56,429	2,382
	Apr	1,204	1,746	1,159	141.9	1,203	1,358	53,952	2,003
	May	430	997	1,510	136.8	1,222	71	52,595	1,897
	Jun	1,273	2,442	1,546	173.1	963	1,008	55,655	2,671
	Jul	1,482	1,179	1,586	142.5	1,032	1,185	57,864	2,047
	Aug	1,906	1,472	1,368	132.7	1,115	1,490	57,261	1,704
	Sep	1,641	1,342	1,822	125.1	1,039	1,793	56,916	1,928
	Oct	1,655	1,237	1,294	120.5	1,079	2,071	58,521	2,606
	Nov	707	1,288	1,167	140.6	1,085	2,785	60,840	2,285
	Dec	1,919	1,411	1,250	80.2	422	2,706	62,877	2,616
1990	Jan	2,701	1,667	1,617	102.7	572	3,412	62,089	2,601
	Feb	3,093	1,275	1,409	125.9	997	1,210	52,675	2,283
	Mar	2,095	1,531	1,655	105.1	1,186	3,705	54,587	3,033
	Apr	2,275	1,576	1,943	57.0	777	503	65,978	2,484
	May	2,911	1,804	2,336	101.5	901	2,405	64,174	3,200
	Jun	2,949	1,811	2,217	103.1	655	5,104	63,794	1,966
	Jul	3,797	1,857	2,014	96.2	677	1,054	62,666	2,420
	Aug	2,595	1,897	2,008	125.3	824	783	62,641	2,343
	Sep	1,453	1,147	2,066	133.1	597	2,661	66,154	3,508
	Oct	1,388	1,843	2,441	109.1	503	2,142	67,119	2,050
	Nov	1,484	1,497	2,161	120.9	343	3,011	57,442	2,439
	Dec	2,174	1,515	2,408	109.8	140	930	57,181	2,489
1991	Jan	3,146	1,464	2,229	139.0	8	2,659	56,266	2,280
	Feb	3,604	1,222	1,976	136.1	170	2,944	50,592	2,916
	Mar	3,387	1,572	2,523	112.6	743	4,315	55,672	3,024
	Apr	2,059	1,501	1,869	127.7	774	899	51,683	3,137
	May	2,418	1,529	1,909	139.4	875	2,022	53,314	2,325
	Jun	2,850	1,206	1,877	154.1	860	2,620	66,264	2,163

Continued

PRODUCTION OF PRINCIPAL MANUFACTURED COMMODITIES **TABLE VII.1**

		Sugar	Beer	Soft Drinks	Cigarettes	Textiles	Cement	Electri-city	Laundry Soap
	Unit	*Tons*	*'000 Ltr*	*'000 Ltr*	*Million*	*'000 Sq M*	*Tons*	*'000 Kwh*	*Tons*
1991	Jul	2,674	1,581	1,767	143.6	1,164	686	73,172	1,587
	Aug	5,142	1,638	2,159	146.1	1,111	2,679	74,677	2,561
	Sep	4,273	1,678	2,188	137.1	1,036	401	66,180	3,392
	Oct	4,679	1,822	2,353	135.7	1,153	739	77,662	3,123
	Nov	4,190	2,038	2,080	160.6	824	5,346	76,139	3,202
	Dec	4,034	2,278	3,052	156.2	183	1,828	80,897	3,573
1992	Jan	4,295	1.846	2,136	121.2	324	3,142	82,575	3,814
	Feb	2,716	1,380	1,682	142.6	855	3,125	75,923	3,165
	Mar	4,745	1,890	2,322	138.2	1,123	2,453	82,761	3,680
	Apr	4,371	1,752	2,063	129.0	991	3,391	85,448	2,645
	May	5,105	1,569	1,561	155.7	1091	4,482	77,100	3,634
	Jun	4,599	1,592	1,529	140.3	800	46	72,486	2,447
	Jul	4,498	968	1,482	141.8	1,007	4,038	87,485	2,304
	Aug	5,022	1,153	1,458	126.3	1,079	2,251	87,111	3,008
	Sep	4,595	1,253	1,540	140.0	1,084	1,260	77,957	3,156
	Oct	4,961	1,283	1,620	127.0	913	3,365	87,688	3,342
	Nov	4,535	1,435	1,986	117.7	305	4,267	86,826	3,645
	Dec	4,097	2,597	2,390	95.1	78	6,061	82,918	3,820
1993	Jan	4,953	2,487	2,024	138.8	96	3,697	82,477	4,847
	Feb	4,284	2,149	2,044	145.0	287	5,899	77,344	4,255
	Mar	4,574	2,198	2,414	131.0	1,051	4,726	81,730	3,880
	Apr	3,272	2,565	2,611	132.5	909	4,613	77,369	4,035
	May	0	2,106	1,764	141.3	965	3,130	82,102	3,969
	Jun	76	2,208	2,077	122.3	901	4,622	75,995	4,001
	Jul	2,473	1,775	2,063	86.5	980	5,731	83,922	3,870
	Aug	3,905	1,576	2,067	80.3	978	786	81,238	3,620
	Sep	4,518	1,684	2,035	88.4	874	6,072	79,837	3,532
	Oct	7,885	1,594	2,139	117.2	436	3,315	83,241	4,399
	Nov	7,125	1,273	2,135	117.4	4	5,416	82,118	3,506
	Dec	6,199	2,266	3,526	111.8	0	3,978	87,304	3,674
1994	Jan	6,339	2,290	2,873	104.5	0	6,203	86,702	4,759
	Feb	6,740	1,737	2,052	100.2	0	4,208	79,990	4,315
	Mar	5,889	1,830	2,565	116.8	521	4,048	91,322	3,422
	Apr	5,778	2,325	2,504	130.3	582	4,384	84,465	3,509
	May	4,291	1,851	2,188	121.7	536	2,837	84,111	3,831
	Jun	3,581	1,995	2,380	133.9	586	3,011	81,030	4,114
	Jul	4,881	2,258	3,428	119.6	533	6,014	88,077	4,124
	Aug	6,209	2,691	4,009	101.6	501	3,849	85,326	3,909
	Sep	6,465	3,159	4,482	120.0	457	4,319	81,760	4,403

Source: Statistics Department, MFEP.

INDEX OF INDUSTRIAL PRODUCTION
Annual Summary, 1987 = 100

TABLE VII.2

	No. of Estabs	Weight	1987	1988	1989	1990	1991	1992	1993	1994
Food processing	*54*	*20.70*	*100.0*	*128.0*	*153.7*	*174.9*	*227.4*	*245.6*	*245.8*	*314.9*
Meat, fish and dairy	12	1.70	100.0	149.4	109.4	127.2	166.8	201.0	245.9	264.3
Grain milling	13	4.30	100.0	139.5	139.1	134.7	114.9	104.7	106.9	186.9
Bakeries	9	1.40	100.0	131.7	153.4	206.6	284.1	325.2	322.8	306.7
Sugar and jaggery	4	1.80	100.0	277.5	514.7	789.3	1220.5	1501.3	1325.6	1814.6
Coffee roasting	3	0.20	100.0	73.1	48.2	74.2	74.3	107.5	46.0	30.1
Coffee processing *	-	8.62	100.0	95.6	106.0	81.0	92.8	70.2	90.2	111.8
Tea processing *	1	1.39	100.0	98.6	130.9	184.1	238.1	247.0	312.1	315.8
Other food processing	4	0.30	100.0	115.4	104.9	100.9	91.1	69.5	73.6	69.2
Animal feeds	8	0.99	100.0	101.9	121.0	116.7	161.2	142.2	130.6	142.3
Tobacco and beverages	*13*	*26.10*	*100.0*	*139.6*	*143.7*	*155.2*	*176.1*	*155.2*	*170.9*	*179.6*
Beer and spirits	5	6.61	100.0	127.1	124.2	125.0	129.3	124.5	155.6	162.5
Soft drinks	7	5.40	100.0	221.3	253.8	362.4	385.5	311.4	378.4	411.8
Cigarettes	1	14.09	100.0	114.1	110.5	89.9	117.7	109.8	98.4	98.6
Textiles and clothing	*13*	*16.30*	*100.0*	*121.8*	*132.7*	*116.3*	*110.9*	*111.9*	*92.7*	*72.9*
Textiles	4	12.00	100.0	106.4	110.4	79.8	88.2	88.7	67.1	38.2
Textile products	4	3.09	100.0	84.3	107.7	116.5	48.7	52.9	77.1	113.3
Garments	5	1.21	100.0	370.9	419.1	477.8	556.0	494.7	387.6	314.2
Leather and footwear	*8*	*2.30*	*100.0*	*62.0*	*62.9*	*75.3*	*60.1*	*79.5*	*68.4*	*61.8*
Timber, paper and printing	*24*	*9.00*	*100.0*	*135.1*	*169.4*	*183.6*	*198.2*	*220.5*	*251.1*	*293.2*
Sawmilling and timber	4	3.20	100.0	96.0	61.5	58.0	58.1	80.3	102.2	105.8
Furniture & foam products	7	2.90	100.0	140.0	221.9	190.9	162.3	175.9	149.3	136.4
Paper and printing	13	2.90	100.0	173.7	236.1	315.2	389.0	420.0	517.4	657.2
Chemicals, paint and soap	*24*	*12.30*	*100.0*	*111.2*	*162.9*	*183.5*	*192.9*	*252.0*	*339.5*	*343.1*
Chemicals	2	0.31	100.0	88.1	88.1	79.9	110.9	137.7	189.7	223.8
Paint	5	0.51	100.0	98.3	167.5	62.0	168.2	438.6	614.2	678.9
Medicine	6	0.50	100.0	70.1	166.8	284.3	103.6	338.2	461.0	481.8
Soap	11	10.98	100.0	114.3	164.6	187.4	200.4	242.7	325.5	324.6
Bricks and cement	*14*	*4.30*	*100.0*	*94.5*	*109.0*	*154.2*	*162.6*	*203.1*	*261.1*	*264.8*
Bricks, tiles, etc.	12	2.23	100.0	98.8	105.2	149.0	167.8	195.3	236.2	258.4
Cement	2	2.07	100.0	89.7	113.2	159.8	157.1	211.6	288.0	271.7
Steel and steel products	*19*	*5.30*	*100.0*	*87.2*	*98.9*	*107.7*	*149.3*	*190.7*	*259.0*	*389.1*
Iron and steel	6	1.51	100.0	125.1	74.1	57.5	130.8	254.3	526.0	919.2
Structural steel	4	2.28	100.0	66.4	134.6	131.0	166.9	141.6	105.6	90.8
Steel products	9	1.51	100.0	80.9	69.9	122.6	141.2	201.3	224.5	311.3
Miscellaneous	*23*	*3.70*	*100.0*	*134.0*	*204.2*	*181.3*	*251.2*	*272.3*	*381.0*	*466.0*
Vehicle accessories	5	0.91	100.0	104.5	164.0	224.8	299.9	329.3	423.9	470.9
Plastic products	7	0.63	100.0	58.2	105.0	107.2	187.1	258.5	434.4	659.2
Electrical products	3	1.15	100.0	100.9	142.9	110.5	82.1	120.0	353.6	426.3
Miscellaneous products	8	1.01	100.0	245.4	372.0	269.0	440.1	402.9	340.3	386.6
Index - all items *	*192*	*100.00*	*100.0*	*123.7*	*145.2*	*155.5*	*178.2*	*191.2*	*215.6*	*243.2*
Annual percentage change			*16.1*	*23.7*	*17.4*	*7.1*	*14.6*	*7.3*	*12.8*	*12.8*

INDEX OF INDUSTRIAL PRODUCTION **TABLE VII.3**

Monthly Summary, 1987 = 100

		Food Proc. *	Drinks and Tobac.	Text. and Cloth.	Leather and Footwear	Timber Paper etc.	Chem. Paint Soap	Bricks and Cement	Steel Prod.	Misc.	All Items
No. of Estabs		55	13	13	8	26	24	14	19	25	197
Weight		*20.7*	*26.1*	*16.3*	*2.3*	*9.0*	*12.3*	*4.3*	*5.3*	*3.7*	*100.0*
Annual											
1982		106.7	48.6	196.7	77.9	68.2	64.6	163.7	81.6	87.6	97.3
1983		103.7	59.8	177.6	152.8	79.6	68.8	177.4	118.5	124.3	103.7
1984		99.8	79.4	136.9	175.5	88.7	61.2	156.5	110.7	139.5	101.0
1985		93.9	84.8	98.9	86.9	76.8	58.6	122.7	133.1	139.1	91.3
1986		85.3	82.2	92.9	90.0	72.0	58.8	120.6	105.9	141.0	86.1
1987		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1988		128.0	139.6	121.8	62.0	135.1	111.2	94.5	87.2	134.0	123.7
1989		153.7	143.7	132.7	62.9	169.4	162.9	109.0	98.9	204.2	145.2
1990		174.9	155.2	116.3	75.3	183.6	183.5	154.2	107.7	181.3	155.5
1991		227.4	176.1	110.9	60.1	198.2	192.9	162.6	149.3	251.3	178.2
1992		245.6	155.2	111.9	79.5	220.5	252.0	203.1	190.7	272.3	191.2
1993		245.8	170.9	92.7	68.4	251.1	339.5	261.1	259.0	381.0	215.6
1994		309.7	227.6	68.1	97.1	299.7	382.7	248.6	389.9	487.3	260.3
Monthly											
1992	Jan	260.2	165.2	69.5	94.3	177.4	264.4	180.0	193.1	282.1	187.4
	Feb	197.1	154.1	121.0	78.1	211.0	234.4	191.3	152.3	295.1	177.6
	Mar	255.4	185.0	145.2	48.0	191.3	278.3	170.7	154.2	324.0	204.9
	Apr	232.9	165.5	132.7	110.5	178.0	230.4	190.3	188.4	301.2	189.2
	May	256.4	157.2	138.8	74.1	239.9	292.6	226.3	171.5	349.7	207.8
	Jun	231.6	148.9	109.1	81.8	255.8	206.9	108.0	203.0	290.3	181.1
	Jul	245.4	138.2	134.1	112.4	248.9	189.3	265.4	208.0	241.6	188.4
	Aug	258.6	131.1	118.9	72.4	228.2	239.6	191.0	200.1	194.8	184.8
	Sep	237.8	142.6	147.4	45.1	206.9	252.5	173.7	241.4	216.6	189.5
	Oct	262.2	144.8	112.4	67.9	258.1	257.7	205.6	171.1	256.5	194.3
	Nov	256.7	153.0	64.9	131.1	232.6	277.5	234.3	213.7	263.1	192.9
	Dec	252.5	177.0	48.8	37.9	217.8	300.5	300.6	191.3	252.1	196.2
1993	Jan	302.1	179.1	41.1	47.9	180.7	378.5	191.3	202.8	231.1	207.4
	Feb	284.8	178.4	53.8	70.7	221.6	351.4	286.8	193.6	242.3	210.6
	Mar	276.2	188.9	119.6	100.8	261.8	323.7	257.1	298.7	281.8	229.0
	Apr	233.5	200.8	123.1	126.3	237.9	327.0	256.8	264.9	329.3	222.6
	May	128.4	166.7	127.4	66.0	239.9	334.5	210.6	258.4	360.9	191.2
	Jun	110.2	172.0	118.2	39.6	235.1	342.8	286.3	255.3	460.0	194.1
	Jul	178.5	143.0	138.0	62.9	295.9	332.9	355.3	275.7	436.9	211.8
	Aug	231.9	141.0	122.7	52.3	274.3	295.4	171.5	287.4	447.9	206.2
	Sep	223.5	143.5	110.1	80.3	250.0	320.3	344.5	271.1	530.4	214.2
	Oct	316.7	157.9	86.3	77.3	261.0	389.2	234.8	285.5	473.2	236.7
	Nov	328.8	157.5	40.5	47.3	336.4	325.8	303.6	314.6	452.9	233.7
	Dec	335.2	221.4	31.6	49.1	218.1	352.4	234.7	200.2	325.2	229.2
1994	Jan	366.7	193.6	34.8	61.5	277.8	422.0	313.4	338.6	432.4	257.9
	Feb	364.2	151.9	42.0	25.6	266.4	383.0	241.3	319.2	405.7	235.9
	Mar	325.0	181.0	90.5	47.6	315.0	319.1	258.3	389.9	433.8	245.8
	Apr	346.0	195.0	88.3	62.0	297.7	297.5	265.6	377.3	407.9	248.2
	May	265.5	168.7	92.5	68.0	297.5	329.5	247.2	436.5	590.7	238.6
	Jun	224.4	189.0	89.4	106.1	309.2	371.5	263.1	473.3	525.4	242.2
	Jul	299.2	224.6	75.4	126.9	287.3	368.8	352.8	447.8	384.0	260.1
	Aug	360.5	246.4	81.1	111.1	276.8	403.2	260.9	469.8	501.5	283.9
	Sep	370.3	277.8	72.0	117.8	351.6	383.9	223.6	432.9	542.1	295.1
	Oct	312.3	295.6	68.3	177.3	311.0	431.4	178.4	357.8	553.0	285.2
	Nov	259.2	282.2	37.4	138.7	319.3	435.9	231.1	361.5	597.8	270.2
	Dec	222.9	325.7	45.7	123.1	286.9	446.9	147.7	274.0	473.5	260.6
1995	Jan	242.0	289.3	56.0	203.4	322.8	508.3	382.9	511.1	484.5	292.5
	Feb	232.7	255.2	76.7	148.9	317.2	488.2	387.6	468.2	419.4	276.3
	Mar	248.3	315.1	69.2	139.9	314.0	523.9	421.7	446.5	454.3	299.4

Source: Statistics Department, MFEP.

* Includes production data as provided by the coffee and tea marketing boards.

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PRODUCTION AND EXPORTS OF PRINCIPAL AGRICULTURAL PRODUCTS

TABLE VII.4

		COFFEE			TEA			COTTON		TOBACCO		
		Deliveries	Exports		Prod	Exports		Exports		Prod	Exports	
		Tons	*Tons*	*US$ '000*	*Tons*	*Tons*	*US$ '000*	*Tons*	*US$ '000*	*Tons*	*Tons*	*US$ '000*
Annual												
1982		161,866	174,700	349,400	2,580	1,200	800	1,800	3,200	647	0	0
1983		148,224	144,300	346,300	3,054	1,300	1,200	7,000	11,200	1,650	700	900
1984		145,971	133,200	359,600	5,214	2,500	3,300	6,700	12,100	1,969	700	1,500
1985		143,995	151,500	348,500	5,758	1,200	1,000	9,553	13,979	1,613	300	400
1986		159,881	140,800	394,200	3,335	2,800	3,100	4,875	5,086	949	0	0
1987		167,067	148,153	307,535	3,511	2,100	1,900	3,443	4,097	1,214	0	0
1988		151,157	144,254	265,279	3,512	3,079	3,079	2,088	2,968	2,639	39	58
1989		169,042	176,453	262,811	4,658	3,195	3,195	2,321	4,020	3,456	490	569
1990		128,747	141,489	140,384	6,704	4,760	3,566	3,808	5,795	3,322	2,269	2,821
1991		147,368	124,819	117,641	8,877	7,018	6,780	7,819	11,731	5,140	2,467	4,540
1992		110,295	119,006	95,372	9,504	7,816	7,721	7,536	8,218	6,686	2,322	4,333
1993		141,085	114,168	106,775	12,102	10,175	11,141	7,961	5,505	5,183	4,109	7,011
Monthly												
1992	Jan	14,807	14,606	14,393	637	761	740	360	470	90	359	764
	Feb	12,500	11,118	10,240	488	675	543	472	518	193	270	537
	Mar	8,596	14,783	11,871	318	380	370	720	770	122	87	180
	Apr	4,520	9,579	8,046	586	462	448	1,122	1,147	118	127	206
	May	4,271	9,241	7,196	1,139	659	657	1,006	1,071	0	0	0
	Jun	4,225	6,142	4,581	666	583	634	694	772	0	0	0
	Jul	12,164	6,463	4,872	875	758	700	1,167	1,356	6	113	232
	Aug	12,374	5,740	3,979	758	845	735	285	304	856	59	74
	Sep	9,206	14,121	9,659	702	657	738	574	583	1,652	247	287
	Oct	8,038	11,216	7,917	1,274	741	748	553	645	1,585	326	591
	Nov	9,188	9,697	7,511	1,034	815	868	236	212	1,153	416	788
	Dec	10,406	6,300	5,107	1,027	480	540	347	370	911	318	674
1993	Jan	22,106	7,961	7,225	966	873	875	128	137	449	480	948
	Feb	22,741	8,746	8,111	987	787	909	632	702	226	401	705
	Mar	15,158	14,707	13,252	928	846	843	219	204	200	394	631
	Apr	9,472	14,831	12,835	1,115	714	722	1,453	722	166	413	773
	May	6,493	12,071	10,666	1,174	897	909	406	456	0	189	300
	Jun	3,836	9,415	8,147	1,072	860	850	1,165	559	0	957	1,483
	Jul	7,215	6,328	5,269	992	1,020	1,149	1,418	714	343	315	496
	Aug	7,237	11,329	9,914	853	916	1,080	2,143	1,514	1,483	20	26
	Sep	6,577	12,716	12,922	815	707	821	172	269	362	0	0
	Oct	5,631	4,203	4,819	910	756	916	66	87	638	154	292
	Nov	10,906	5,098	5,639	1,201	950	1,150	44	59	532	294	511
	Dec	23,713	6,763	7,976	1,089	849	917	115	82	784	492	846
1994	Jan	23,190	12,587	14,910	1,072	881	1,260	n.a.	n.a.	39	285	569
	Feb	18,054	18,667	20,466	804	730	898	n.a.	n.a.	215	536	1,079
	Mar	16,316	21,713	24,693	773	657	828	n.a.	n.a.	544	483	1,109
	Apr	13,985	22,012	26,077	1,314	917	1,219	n.a.	n.a.	n.a.	12	24
	May	10,231	19,199	24,083	1,268	964	1,349	n.a.	n.a.	n.a.	144	274
	Jun	11,147	14,052	20,720	1,148	1,053	1,685	n.a.	n.a.	n.a.	48	91
	Jul	17,881	20,691	43,717	1,117	1,050	1,732	n.a.	n.a.	n.a.	96	182
	Aug	20,875	12,357	25,133	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	86	164
	Sep	20,672	18,207	38,177	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	696	1,167

Source: Statistics Department, MFEP.

NEW CONSUMER PRICE INDEX: KAMPALA

TABLE VIII.1

Based on 1989-90 Household Budget Survey
All Households, September 1989 = 100

	Item	Food	Beverages & Tobacco	Clothing & Footwear	Rent, Fuel & Utilities	HH & Personal Goods	Transport & Comm.	Other Goods & Services	Weighted Average CPI	Annual % Change	Monthly % Change
	Weights	*48.6*	*10.2*	*6.1*	*12.5*	*10.4*	*4.6*	*7.6*	*100.0*		
1995	January	245.3	284.0	211.5	405.6	233.1	320.4	472.9	286.7	4.7	0.8
	February	252.2	282.6	235.5	422.5	232.7	312.7	531.9	297.6	9.0	3.8
	March	257.4	284.1	218.6	419.2	234.7	320.3	528.5	299.1	8.7	0.5
	April	259.5	284.4	224.1	420.2	236.2	320.7	529.2	300.9	6.8	0.6
	May	260.1	283.6	215.3	412.9	238.7	321.1	527.4	299.8	4.9	-0.4
	June	256.4	280.8	220.9	423.2	238.5	321.7	536.3	300.0	5.1	0.1
	July	243.4	277.0	225.1	427.4	241.5	323.4	538.2	294.6	5.9	-1.8
	August	246.0	277.7	226.2	433.2	244.8	344.6	539.8	298.2	10.1	1.2
	September	249.2	283.7	228.3	458.7	245.0	345.7	546.2	304.2	12.6	
ANNUAL AVERAGE - CALENDAR YEAR:											
1989		90.7	91.2	99.4	88.6	94.1	97.6	93.1	91.8	..	
1990		108.1	124.7	135.7	149.7	120.9	139.3	146.0	122.3	33.2	
1991		132.9	158.9	172.9	211.9	151.3	177.9	196.2	156.6	28.1	
1992		214.5	245.3	226.4	289.6	222.8	266.5	316.7	238.8	52.4	
1993		206.5	279.7	239.8	333.3	236.1	285.3	400.6	253.3	6.1	
1994		240.3	281.3	224.0	366.6	235.2	305.9	453.4	278.0	9.7	
ANNUAL AVERAGE - FISCAL YEAR:											
1989/90		104.4	113.2	115.4	119.2	109.5	117.3	119.2	110.1	..	
1990/91		119.4	140.4	153.0	175.1	132.0	157.3	166.2	137.1	24.6	
1991/92		170.2	191.8	200.5	252.2	190.8	217.9	249.1	194.8	42.1	
1992/93		214.9	262.2	240.6	315.2	228.6	286.9	366.5	250.1	28.4	
1993/94		226.1	298.6	231.4	351.7	240.4	291.7	430.9	269.6	7.8	
1994/95		246.2	277.9	219.0	396.0	233.5	317.2	491.2	287.1	6.5	
% RATE OF CHANGE END POINT - CALENDAR YEAR:									*Change in Average CPI*	*EOP Dec-Dec*	*EOP Jan-Dec*
1989		..	..	..	..	..	..	..	..	56.7	52.3
1990		19.3	36.8	36.5	69.0	28.4	42.7	56.9	33.2	22.4	12.7
1991		22.9	27.4	27.4	41.6	25.2	27.7	34.4	28.1	32.2	24.3
1992		61.4	54.4	31.0	36.7	47.3	49.8	61.4	52.4	41.6	33.4
1993		-3.7	14.0	5.9	15.1	6.0	7.0	26.5	6.1	6.1	7.4
1994		16.4	0.6	-6.6	10.0	-0.4	7.2	13.2	9.7	7.0	3.8
END POINT - FISCAL YEAR:									*Change in Average CPI*	*EOP Jun-Jun*	*EOP Jul-Jun*
1989/90		..	..	..	..	..	..	..	..	26.9	21.5
1990/91		14.3	24.0	32.6	46.9	20.5	34.1	39.5	24.6	32.0	32.0
1991/92		42.6	36.7	31.0	44.1	44.6	38.5	49.9	42.1	62.9	58.8
1992/93		26.3	36.7	20.0	25.0	19.8	31.7	47.1	28.4	-0.5	-2.9
1993/94		5.2	13.9	-3.8	11.6	5.2	1.7	17.6	7.8	15.1	11.8
1994/95		8.9	-6.9	-5.3	12.6	-2.9	8.7	14.0	6.5	5.1	7.9

Source: Statistics Department, MFEP.

NEW CONSUMER PRICE INDEX: COMPOSITE **TABLE VIII.2**

Based on 1989-90 Household Budget Survey

All Households, September 1989 = 100

	Item	Food	Beverages & Tobacco	Clothing & Footwear	Rent, Fuel & Utilities	HH & Personal Goods	Transport & Comm.	Other Goods & Services	Weighted Average CPI	Annual % Change	Monthly % Change
	Weights	*50.1*	*10.0*	*6.6*	*10.8*	*10.7*	*4.3*	*7.6*	*100.0*		
1995	January	252.1	292.9	214.2	403.1	232.2	320.0	451.9	286.0	5.1	-0.2
	February	256.8	290.6	227.2	412.6	231.8	316.8	488.6	292.6	7.0	2.3
	March	260.0	292.6	217.7	410.7	233.8	319.2	486.6	293.7	6.8	0.4
	April	264.4	291.3	219.8	413.8	234.8	319.2	490.5	296.7	4.4	1.0
	May	267.5	289.5	214.9	414.3	236.7	319.4	489.7	297.9	2.8	0.4
	June	263.8	287.4	218.9	423.5	237.4	319.8	504.6	298.3	3.3	0.1
	July	247.9	284.5	223.0	432.7	241.0	320.2	504.7	291.8	3.9	-2.2
	August	248.2	285.5	225.2	430.9	243.2	340.5	507.8	293.3	6.9	0.5
	September	252.7	289.7	227.5	447.0	243.7	347.0	511.9	298.5	9.5	
ANNUAL AVERAGE - CALENDAR YEAR:											
1990		109.3	126.8	135.9	150.6	120.6	143.2	141.0	122.3	..	
1991		135.2	158.2	174.2	211.7	150.4	183.2	190.9	156.2	27.7	
1992		223.6	248.4	226.2	294.7	221.1	272.5	300.1	241.6	54.7	
1993		214.8	285.3	238.2	338.9	233.5	288.4	375.2	254.1	5.2	
1994		248.9	290.7	223.5	374.6	234.7	306.0	431.0	279.8	10.1	
ANNUAL AVERAGE - FISCAL YEAR:											
1990/91		121.1	140.4	153.6	175.0	131.3	162.4	161.1	136.9	..	
1991/92		174.1	191.7	201.2	253.3	189.3	224.0	239.5	194.9	42.4	
1992/93		225.8	270.1	239.5	321.7	226.6	290.8	344.4	253.4	30.0	
1993/94		234.2	303.3	230.1	356.8	238.8	293.9	404.7	270.1	6.6	
1994/95		253.2	287.3	218.1	399.2	232.9	316.6	463.6	286.6	6.1	
% RATE OF CHANGE END POINT - CALENDAR YEAR:									*Change in Average CPI*	*EOP Dec-Dec*	*EOP Jan-Dec*
1991		23.7	24.8	28.2	40.5	24.7	28.0	35.4	27.7	32.9	25.3
1992		65.5	57.0	29.9	39.2	47.0	48.7	57.2	54.7	45.2	36.3
1993		-4.0	14.8	5.3	15.0	5.6	5.8	25.0	5.2	4.2	5.9
1994		15.9	1.9	-6.2	10.5	0.5	6.1	14.9	10.1	7.0	5.2
END POINT - FISCAL YEAR:									*Change in Average CPI*	*EOP Jun-Jun*	*EOP Jul-Jun*
1990/91		..	..	..	..	..	..	..	..	32.2	32.6
1991/92		43.7	36.5	31.0	44.8	44.2	38.0	48.7	42.4	66.5	63.7
1992/93		29.7	40.9	19.0	27.0	19.7	29.8	43.8	30.0	-2.3	-3.9
1993/94		3.7	12.3	-3.9	10.9	5.4	1.0	17.5	6.6	16.1	13.3
1994/95		8.1	-5.3	-5.2	11.9	-2.5	7.7	14.6	6.1	3.3	6.2

Source: Statistics Department, MFEP.

MAJOR SOURCES OF INCOME BY REGION **TABLE IX.1**

	Quartile			
	Bottom	Lower Middle	Upper Middle	Top
CENTRAL RURAL	*100.0*	*100.0*	*100.0*	*100.0*
Earned income	74.0	86.9	86.0	91.7
Agriculture	58.6	69.6	61.5	52.8
Business	7.0	8.9	15.9	25.1
Employment	7.0	6.8	7.8	12.0
Government employment	1.4	2.4	2.9	6.1
Private employment	5.6	4.4	4.9	5.9
Residual earned income	1.5	1.6	0.8	1.8
Unearned income	26.0	13.1	14.1	8.3
Rent	5.7	2.1	1.6	1.3
Remittances	16.8	10.0	11.0	6.5
Transfers	0.0	0.1	0.0	0.2
Dowry	1.7	0.3	0.5	0.2
Inheritance	1.8	0.6	1.0	0.1
EASTERN RURAL	*100.0*	*100.0*	*100.0*	*100.0*
Earned income	77.2	84.6	89.3	92.2
Agriculture	60.4	62.5	65.7	57.7
Business	11.1	11.9	14.1	23.6
Employment	3.7	7.0	7.2	9.3
Government employment	1.4	5.0	4.5	6.3
Private employment	2.3	2.1	2.6	3.0
Residual earned income	2.0	3.2	2.4	1.7
Unearned income	22.8	15.4	10.7	7.8
Rent	1.7	1.0	0.6	0.3
Remittances	17.9	11.6	8.6	6.3
Transfers	1.2	0.0	0.0	0.0
Dowry	1.2	1.9	0.8	0.7
Inheritance	0.9	0.8	0.7	0.5

Continued

MAJOR SOURCES OF INCOME BY REGION **TABLE IX.1**

	Quartile			
	Bottom	Lower Middle	Upper Middle	Top
WESTERN RURAL	*100.0*	*100.0*	*100.0*	*100.0*
Earned income	52.9	63.2	70.6	79.3
Agriculture	47.2	52.9	60.0	63.5
Business	1.6	4.2	5.6	8.7
Employment	3.4	5.5	4.5	6.3
Government employment	1.9	1.9	2.2	3.7
Private employment	1.5	3.6	2.3	2.6
Residual earned income	0.7	0.6	0.5	0.9
Unearned income	47.2	36.8	29.4	20.7
Rent	2.9	1.9	1.7	0.7
Remittances	29.4	27.6	22.4	14.8
Transfers	1.8	0.0	0.3	0.2
Dowry	10.2	4.5	3.1	2.9
Inheritance	2.9	2.8	2.0	2.1
NORTHERN RURAL	*100.0*	*100.0*	*100.0*	*100.0*
Earned income	70.8	80.2	80.3	85.7
Agriculture	60.4	66.5	64.1	61.8
Business	7.0	5.3	8.0	8.9
Employment	2.4	6.8	6.5	12.4
Government employment	1.3	4.3	4.1	6.8
Private employment	1.2	2.6	2.4	5.7
Residual earned income	1.0	1.5	1.7	2.7
Unearned income	29.2	19.8	19.7	14.3
Rent	1.1	0.2	0.4	0.1
Remittances	21.2	14.8	12.1	11.0
Transfers	0.2	0.2	0.9	0.0
Dowry	4.4	3.6	4.6	2.4
Inheritance	2.4	1.0	1.8	0.7

Source: Calculations from the 1992/93 Integrated Household Survey.

Note: The quartiles are defined with reference to the national population: the cut-off points for each quartile are the same for all regions. Thus, the poorest quartile in the northern rural region will include more than 25% of the northern population, and the poorest quartile in urban areas will include less than 25% of the urban population.

	Quartile			
	Bottom	Lower Middle	Upper Middle	Top
URBAN	*100.0*	*100.0*	*100.0*	*100.0*
Crops	98.4	97.7	94.6	80.6
Grains	23.6	21.1	22.1	15.2
Maize	11.7	10.3	12.0	12.4
Rice	3.9	0.5	0.9	0.3
Millet	4.2	4.0	2.8	1.1
Sorghum	3.8	6.2	6.3	1.4
Other grains	0.1	0.1	0.1	0.1
Matooke and tubers	47.2	44.1	50.3	44.5
Matooke	3.6	11.3	10.7	11.4
Sweet potatoes	14.8	16.2	20.9	15.1
Cassava	22.5	15.3	17.3	16.6
Other tubers	6.3	1.3	1.4	1.4
Pulses, beans and nuts	20.2	27.0	15.9	15.6
Beans	10.3	14.6	10.0	10.8
Peas	0.6	0.5	0.1	0.3
Groundnuts	7.5	9.5	4.5	3.4
Cow peas	0.5	0.2	0.3	0.7
Simsim	1.1	1.3	0.8	0.3
Other pulses, beans and nuts	0.1	1.0	0.3	0.2
Fruit	1.7	1.0	1.2	1.0
Sugar cane	0.9	0.1	0.3	0.1
Other fruits	0.7	0.9	0.9	0.9
Vegetables	2.4	1.2	0.7	2.1
Onions	0.0	0.0	0.2	0.1
Other vegetables	2.4	1.2	0.5	2.1
Cash crops	3.1	3.1	4.1	2.0
Coffee	2.6	2.8	2.0	1.5
Cotton	0.5	0.1	1.4	0.1
Tea	0.0	0.0	0.1	0.0
Tobacco	0.0	0.2	0.2	0.2
Other cash crops	0.0	0.0	0.4	0.2
Other crops	0.1	0.2	0.2	0.1
Animal revenue	1.6	2.3	5.4	19.5

Continued

	Quartile			
	Bottom	Lower Middle	Upper Middle	Top
RURAL	*100.0*	*100.0*	*100.0*	*100.0*
Crops	94.9	94.9	95.3	93.1
Grains	26.4	21.3	19.3	16.0
Maize	8.5	7.7	7.3	6.8
Rice	1.0	1.2	1.3	1.1
Millet	8.5	7.2	6.2	5.0
Sorghum	7.5	5.0	3.9	3.0
Other grains	0.9	0.2	0.6	0.1
Matooke and tubers	41.2	45.2	49.4	52.8
Matooke	8.8	12.7	18.3	22.0
Sweet potatoes	15.2	15.5	13.6	15.0
Cassava	16.0	15.5	15.7	14.1
Other tubers	1.3	1.5	1.8	1.7
Pulses, beans and nuts	17.4	18.2	17.1	16.0
Beans	8.6	9.9	10.0	9.5
Peas	0.8	0.5	0.3	0.3
Groundnuts	4.7	4.3	4.2	4.1
Cow peas	0.2	0.4	0.2	0.2
Simsim	2.3	2.4	1.7	1.5
Other pulses, beans and nuts	0.9	0.7	0.7	0.4
Fruit	2.2	2.3	2.2	2.3
Sugar cane	0.2	0.2	0.1	0.2
Other fruits	2.0	2.1	2.1	2.1
Vegetables	1.4	1.4	1.2	1.3
Onions	0.1	0.2	0.2	0.3
Other vegetables	1.3	1.1	1.1	1.0
Cash crops	6.0	6.3	5.9	4.6
Coffee	3.7	3.8	3.4	3.1
Cotton	1.7	1.2	1.7	0.9
Tea	0.0	0.1	0.1	0.2
Tobacco	0.5	1.1	0.6	0.3
Other cash crops	0.1	0.1	0.1	0.1
Other crops	5.0	5.4	4.9	3.7
Animal revenue	5.1	5.2	4.8	6.9

Source: Calculations from the 1992/93 Integrated Household Survey.

Note: This table reports average household shares. Agricultural revenue includes crops grown for own consumption valued at producer prices. Revenue is reported rather than income because costs were not disaggregated.

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AGRICULTURAL REVENUE SOURCES IN UGANDA BY REGION **TABLE IX.3**

	Quartile			
	Bottom	Lower Middle	Upper Middle	Top
CENTRAL RURAL	*100.0*	*100.0*	*100.0*	*100.0*
Crops	96.2	95.2	94.0	88.2
Grains	7.0	7.8	7.8	7.6
Maize	4.7	5.8	6.4	5.9
Rice	0.0	0.0	0.0	0.0
Millet	1.8	1.5	1.2	1.0
Sorghum	0.5	0.4	0.2	0.6
Matooke and tubers	53.4	57.0	58.3	56.0
Matooke	14.1	14.9	18.6	19.3
Sweet potatoes	15.1	18.3	15.6	16.9
Cassava	23.4	21.7	21.7	17.9
Other tubers	0.7	2.1	2.4	1.8
Pulses, beans and nuts	17.2	14.5	14.9	13.3
Beans	14.3	12.1	12.4	10.5
Peas	0.0	0.1	0.0	0.0
Groundnuts	2.6	1.8	2.1	2.6
Cow peas	0.0	0.2	0.0	0.1
Simsim	0.0	0.1	0.3	0.1
Other pulses, beans and nuts	0.3	0.2	0.1	0.1
Fruit	2.6	3.5	3.6	3.2
Sugar cane	0.1	0.2	0.1	0.0
Other fruits	2.5	3.3	3.5	3.2
Vegetables	1.1	1.9	1.6	1.9
Onions	0.1	0.6	0.4	0.6
Other vegetables	1.1	1.3	1.2	1.3
Cash crops	14.6	10.3	7.8	6.0
Coffee	14.5	10.2	7.3	5.5
Cotton	0.0	0.0	0.0	0.1
Tea	0.0	0.0	0.0	0.3
Tobacco	0.0	0.0	0.1	0.0
Other cash crops	0.1	0.1	0.5	0.2
Other crops	0.3	0.2	-0.1	0.1
Animal revenue	3.9	4.8	6.0	11.8

Continued

AGRICULTURAL REVENUE SOURCES IN UGANDA BY REGION TABLE IX.3

	Quartile			
	Bottom	Lower Middle	Upper Middle	Top
EASTERN RURAL	*100.0*	*100.0*	*100.0*	*100.0*
Crops	97.6	96.7	95.4	95.9
Grains	32.9	32.3	31.8	30.2
Maize	11.1	11.6	11.4	13.5
Rice	2.3	3.3	4.4	3.4
Millet	14.8	12.6	11.3	8.9
Sorghum	4.7	4.8	4.7	4.1
Other grains	0.1	0.0	0.1	0.2
Matooke and tubers	44.4	44.0	42.9	44.1
Matooke	7.1	9.5	13.5	14.8
Sweet potatoes	19.4	18.5	13.1	13.2
Cassava	17.4	15.7	15.9	15.3
Other tubers	0.6	0.3	0.4	0.8
Pulses, beans and nuts	10.1	11.3	11.3	12.3
Beans	4.1	5.0	6.0	6.6
Peas	0.2	0.1	0.1	0.1
Groundnuts	3.8	4.1	3.7	4.1
Cow peas	0.2	0.8	0.2	0.3
Simsim	0.2	0.4	0.3	0.7
Other pulses, beans and nuts	1.6	0.9	0.9	0.5
Fruit	2.4	2.1	1.7	2.1
Sugar cane	0.4	0.0	0.2	0.4
Other fruits	2.0	2.0	1.5	1.7
Vegetables	1.5	1.4	1.2	1.4
Onions	0.0	0.1	0.1	0.2
Other vegetables	1.4	1.4	1.2	1.2
Cash crops	6.0	5.4	6.5	5.8
Coffee	2.1	2.8	3.2	3.3
Cotton	3.9	2.5	3.3	2.3
Tea	0.0	0.2	0.0	0.1
Tobacco	0.0	0.1	0.0	0.1
Other crops	0.3	0.1	0.1	0.1
Animal revenue	2.4	3.3	4.6	4.1

Continued

AGRICULTURAL REVENUE SOURCES IN UGANDA BY REGION **TABLE IX.3**

	Quartile			
	Bottom	Lower Middle	Upper Middle	Top
WESTERN RURAL	*100.0*	*100.0*	*100.0*	*100.0*
Crops	99.1	97.1	97.0	95.5
Grains	17.3	14.2	13.0	9.7
Maize	5.4	4.9	4.3	3.1
Rice	0.4	0.3	0.1	0.4
Millet	5.4	5.9	5.0	4.1
Sorghum	5.5	3.1	3.6	2.2
Other grains	0.6	0.0	0.0	0.0
Matooke and tubers	52.5	55.6	58.9	64.5
Matooke	20.3	26.8	31.6	37.0
Sweet potatoes	15.8	14.7	14.9	15.7
Cassava	11.5	10.4	8.7	8.9
Other tubers	4.9	3.7	3.7	2.9
Pulses, beans and nuts	20.4	19.8	18.7	15.1
Beans	15.2	15.4	13.1	10.5
Peas	1.0	0.4	0.4	0.3
Groundnuts	3.6	3.4	4.9	4.0
Cow peas	0.1	0.0	0.1	0.1
Simsim	0.5	0.4	0.1	0.0
Other pulses, beans and nuts	0.1	0.3	0.1	0.2
Fruit	2.7	2 6	2.2	2.1
Sugar cane	0.2	0.1	0.0	0.3
Other fruits	2.5	2.5	2.2	1.8
Vegetables	1.6	0.8	0.8	0.7
Onions	0.2	0.2	0.1	0.1
Other vegetables	1.4	0.6	0.7	0.6
Cash crops	4.6	3.8	3.4	3.3
Coffee	3.3	2.7	2.2	2.2
Cotton	0.4	0.5	0.2	0.2
Tea	0.0	0.0	0.3	0.4
Tobacco	0.8	0.6	0.7	0.5
Other cash crops	0.1	0.0	0.0	0.0
Animal revenue	0.9	2.9	3.0	4.5

Continued

AGRICULTURAL REVENUE SOURCES IN UGANDA BY REGION TABLE IX.3

	Quartile			
	Bottom	Lower Middle	Upper Middle	Top
NORTHERN RURAL	*100.0*	*100.0*	*100.0*	*100.0*
Crops	89.0	90.3	93.6	91.7
Grains	35.1	27.9	26.8	23.2
Maize	9.8	7.5	6.8	6.4
Rice	0.6	0.7	0.0	0.7
Millet	7.3	7.3	7.3	8.0
Sorghum	15.1	11.7	9.2	8.0
Other grains	2.4	0.8	3.4	0.1
Matooke and tubers	24.9	24.8	29.0	32.1
Matooke	0.7	0.7	1.2	0.9
Sweet potatoes	10.4	9.6	8.7	12.7
Cassava	13.7	14.4	19.1	18.5
Other tubers	0.1	0.0	0.0	0.0
Pulses, beans and nuts	22.9	29.0	28.3	30.3
Beans	6.2	8.7	7.7	10.2
Peas	1.6	1.4	1.1	1.4
Groundnuts	7.4	7.9	7.1	7.7
Cow peas	0.4	0.4	0.7	0.5
Simsim	6.5	9.3	9.2	9.6
Other pulses, beans and nuts	0.9	1.3	2.5	0.9
Fruit	1.6	1.0	1.0	1.0
Sugar cane	0.2	0.4	0.0	0.0
Other fruits	1.5	0.6	1.0	1.0
Vegetables	1.4	1.3	1.5	1.4
Onions	0.1	0.1	0.0	0.0
Other vegetables	1.3	1.2	1.4	1.4
Cash crops	2.6	5.8	6.6	3.2
Coffee	0.1	0.2	0.2	0.1
Cotton	1.1	1.5	3.9	2.3
Tobacco	1.2	3.9	2.5	0.6
Other cash crops	0.2	0.2	0.0	0.3
Other crops	1.9	5.2	5.7	2.2
Animal revenue	11.0	9.7	6.4	8.4

Source: Calculations from the 1992/93 Integrated Household Survey.

Note: This table reports average household shares. Agricultural revenue includes crops grown for own consumption valued at producer prices. Revenue is reported rather than income because costs were not disaggregated.

MEAN SHARE OF FOOD ITEMS IN HOUSEHOLD BUDGETS TABLE IX.4

	Real Expenditure Quartiles			
	Bottom	Lower Middle	Upper Middle	Top
Matooke, cash	0.6	1.3	1.6	2.6
Matooke, kind	3.8	5.5	7.3	7.4
Sweet potatoes, cash	0.7	0.7	0.8	0.9
Sweet potatoes, kind	6.4	7.2	6.0	4.8
Irish potatoes, cash	0.2	0.2	0.4	0.3
Irish potatoes, kind	0.7	0.8	0.9	0.8
Cassava, cash	3.7	2.6	2.5	2.0
Cassava, kind	5.9	5.7	5.2	3.5
Other tubers, kind	0.1	0.1	0.1	0.1
Rice, cash	0.2	0.3	0.3	1.0
Rice, kind	0.1	0.2	0.2	0.2
Maize, cash	3.4	2.9	2.7	2.7
Maize, kind	2.4	2.8	2.9	1.8
Bread, cash	0.0	0.1	0.2	0.6
Millet, cash	0.7	0.6	0.5	0.4
Millet, kind	2.9	2.7	2.4	1.5
Sorghum, cash	1.0	0.7	0.6	0.3
Sorghum, kind	2.7	1.7	1.5	0.9
Simsim, cash	0.4	0.5	0.4	0.3
Simsim, kind	0.9	0.6	0.3	0.3
Other cereals, cash	0.1	0.0	0.0	0.0
Other cereals, kind	0.1	0.0	0.0	0.0
Meat, cash	2.7	3.6	3.8	4.5
Meat, kind	1.0	1.0	1.1	0.9
Fish, cash	2.8	3.1	2.9	2.7
Milk, cash	0.7	0.9	1.3	2.2
Milk, kind	1.5	1.8	2.1	3.1
Oil, cash	0.4	0.7	0.9	1.1
Oil, kind	0.1	0.1	0.1	0.1
Fruit/vegetables, cash	1.1	1.4	1.7	2.1
Fruit/vegetables, kind	6.0	3.9	3.1	1.9
Beans, cash	3.0	2.6	2.3	2.2
Beans, kind	5.7	6.1	5.7	4.4
Coffee/tea, cash	1.7	2.4	3.0	3.5
Coffee/tea, kind	0.1	0.1	0.2	0.2
Soft drinks, cash	0.0	0.0	0.1	0.3
Alcohol, cash	2.0	2.0	2.1	2.6
Alcohol, kind	0.7	0.6	0.5	0.5
Tobacco, cash	0.7	0.7	0.7	0.9
Tobacco, kind	0.2	0.1	0.1	0.1

Source: Estimates from the 1992/93 Integrated Household Survey.

Notes: The above data indicate the mean of the share across housholds rather than the share of the total.

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SHARE OF RENT AND FUEL IN HOUSEHOLD BUDGETS **TABLE IX.5**

				Expenditure Quartiles			
	All	Urban	Rural	Bottom	Lower Middle	Upper Middle	Top
IMPLIED SHARE	11.8	13.9	9.4	12.6	11.9	11.1	11.9
Rent, cash	2.6	4.7	0.4	0.8	1.3	1.9	3.5
Rent, imputed	3.6	4.0	3.2	3.8	3.5	3.0	3.8
Electricity	0.6	1.0	0.1	0.1	0.2	0.3	0.8
Paraffin	1.3	1.1	1.5	1.8	1.7	1.5	1.1
Charcoal	1.1	2.0	0.2	0.4	0.8	1.1	1.3
Firewood	2.6	1.1	4.1	5.6	4.5	3.3	1.4
Other fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN SHARE	12.0	13.9	11.0	13.5	12.7	11.6	11.1
Rent, cash	1.8	4.5	0.4	0.7	1.3	1.7	2.9
Rent, imputed	3.3	2.7	3.6	4.3	3.6	3.0	2.7
Electricity	0.2	0.6	0.0	0.1	0.1	0.2	0.5
Paraffin	1.6	1.6	1.7	1.8	1.8	1.7	1.4
Charcoal	0.9	2.4	0.2	0.3	0.7	1.0	1.4
Firewood	4.1	2.1	5.2	6.4	5.3	4.0	2.3
Other fuel	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Estimates based on the 1992/93 Integrated Household Survey.

District	Ratio to Total Population		Dependency Ratio
	Men	Women	
Apac	21.9	24.0	54.1
Arua	25.4	26.1	48.5
Bundibugyo	25.5	26.5	48.0
Bushenyi	22.1	25.4	52.5
Gulu	21.5	26.1	52.4
Hoima	21.9	24.8	53.3
Iganga	23.1	24.8	52.1
Jinja	27.5	27.7	44.8
Kabale	24.3	24.6	51.1
Kabarole	23.0	25.4	51.6
Kalangala	26.5	21.4	52.1
Kampala	27.8	29.7	42.5
Kamuli	22.4	24.1	53.5
Kapchorwa	24.1	23.3	52.6
Kasese	22.9	25.2	51.9
Kibaale	21.6	23.7	54.7
Kiboga	21.9	22.1	56.0
Kisoro	20.2	24.5	55.3
Kitgum	21.8	27.5	50.7
Kotido	19.7	26.0	54.3
Kumi	19.4	56.5	24.1
Lira	24.3	22.4	53.3
Luwero	20.5	24.2	55.3
Masaka	21.5	23.0	55.5
Masindi	25.2	24.8	50.0
Mbale	24.1	25.4	50.5
Mbarara	25.0	27.4	47.6
Moroto	20.3	27.9	51.8
Moyo	25.1	23.8	51.1
Mpigi	23.2	24.8	52.0
Mubende	21.5	23.7	54.8
Mukono	21.3	24.8	53.9
Nebbi	21.1	25.8	53.1
Pallisa	22.1	24.8	53.1
Rakai	21.6	25.7	52.7
Rukungiri	24.0	26.0	50.0
Soroti	21.2	25.1	53.7
Tororo	23.7	27.4	48.9

Source: Estimates from the 1992/93 Integrated Household Survey.

Note: The above data refer to men and women from 16 to 59 years of age.

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DISTRIBUTION OF THE DISTRICT POPULATION BY EXPENDITURE QUARTILES
In Percent

TABLE IX.7

	Expenditure Quartile				
	Bottom	Lower Middle	Upper Middle	Top	Total
Apac	24.8	30.0	28.9	16.4	100.0
Arua	32.5	35.0	19.4	13.1	100.0
Bundibugyo	15.0	23.5	26.0	35.5	100.0
Bushenyi	15.3	21.4	29.1	34.3	100.0
Gulu	38.4	27.6	15.4	18.7	100.0
Hoima	25.0	17.2	25.8	31.9	100.0
Iganga	29.5	25.3	21.9	23.3	100.0
Jinja	15.5	20.0	36.7	27.9	100.0
Kabale	17.0	25.7	35.4	21.9	100.0
Kabarole	15.2	27.0	25.5	32.3	100.0
Kalangala	11.7	17.0	16.8	54.5	100.0
Kampala	3.4	11.5	22.4	62.7	100.0
Kamuli	42.6	27.5	20.3	9.6	100.0
Kapchorwa	12.6	21.4	31.4	34.6	100.0
Kasese	22.8	19.5	28.2	29.5	100.0
Kibaale	21.0	29.9	30.6	18.5	100.0
Kiboga	19.1	28.3	33.2	19.4	100.0
Kisoro	38.8	22.4	22.7	16.0	100.0
Kitgum	63.5	27.3	6.3	2.8	100.0
Kotido	67.6	18.5	10.5	3.5	100.0
Kumi	26.6	38.1	24.9	10.4	100.0
Lira	25.5	26.8	28.2	19.6	100.0
Luwero	27.0	31.4	21.8	19.9	100.0
Masaka	20.5	26.7	27.5	25.3	100.0
Masindi	32.8	29.7	22.0	15.5	100.0
Mbale	22.8	22.1	31.4	23.7	100.0
Mbarara	6.8	20.4	32.1	40.7	100.0
Moroto	46.7	23.7	7.3	22.3	100.0
Moyo	41.1	27.2	20.6	11.2	100.0
Mpigi	13.7	18.7	31.9	35.7	100.0
Mubende	19.6	29.3	28.0	23.1	100.0
Mukono	21.3	24.1	24.0	30.7	100.0
Nebbi	45.2	36.1	15.5	3.3	100.0
Pallisa	31.3	29.7	25.3	13.7	100.0
Rakai	24.7	21.5	27.5	26.3	100.0
Rukungiri	26.2	18.3	24.4	31.2	100.0
Soroti	37.3	32.4	20.2	10.2	100.0
Tororo	28.6	28.8	21.9	20.7	100.0

Source: 1992/93 Integrated Household Survey.

CENSUS ESTIMATES OF CHILD MORTALITY BY DISTRICT TABLE X.1

	Mortality Rates		
	0-11 Months	12-59 Months	0-59 Months
Apac	114	86	191
Arua	137	108	230
Bundibugyo	150	122	254
Bushenyi	122	93	204
Gulu	172	143	290
Hoima	91	63	148
Iganga	125	96	209
Jinja	97	69	159
Kabale	114	86	190
Kabarole	136	107	228
Kalangala	98	70	161
Kampala	80	53	129
Kamuli	118	89	196
Kapchorwa	104	76	172
Kasese	103	75	171
Kibaale	122	94	205
Kiboga	138	109	231
Kitgum	165	136	279
Kosoro	105	76	173
Kotido	145	117	245
Kumi	122	93	204
Lira	127	99	214
Luwero	117	88	195
Masaka	107	79	178
Masindi	118	89	196
Mbale	129	100	216
Mbarara	145	117	245
Moroto	147	118	248
Moyo	143	114	241
Mpigi	94	66	154
Mubende	119	90	198
Mukono	102	74	169
Nebbi	139	110	237
Pallisa	124	95	207
Rakai	119	91	199
Rukungiri	122	97	205
Soroti	116	87	192
Tororo	138	109	231
Uganda	122	93	203

Source: 1991 Population and Housing Census, Statistics Department.

	Women					
	< 20	21-25	26-30	31-35	36-40	> 40
Mean Births						
Rural	0.41	2.33	4.00	5.56	6.50	6.83
Urban	0.33	1.86	3.04	4.60	6.14	6.31
Expenditure quartiles:						
Bottom	0.38	2.53	4.32	5.84	6.94	7.25
Lower middle	0.41	2.39	3.97	5.44	6.41	6.68
Upper middle	0.42	2.24	4.06	5.62	6.56	6.80
Top	0.37	1.98	3.25	4.73	5.86	6.37
Maternal education:						
None	0.60	2.42	4.07	5.46	6.35	6.73
Some primary	0.36	2.43	4.00	5.57	6.64	7.14
Some secondary	0.24	1.38	3.10	4.89	6.73	6.17
Some further	0.54	1.29	2.14	3.51	4.97	5.59
Ratio of Children Who Have Died						
Rural	0.12	0.15	0.18	0.20	0.20	0.31
Urban	0.09	0.11	0.13	0.15	0.17	0.27
Expenditure quartiles:						
Bottom	0.13	0.17	0.17	0.19	0.19	0.33
Lower middle	0.15	0.13	0.16	0.19	0.20	0.32
Upper middle	0.07	0.17	0.19	0.20	0.19	0.30
Top	0.11	0.13	0.16	0.19	0.20	0.30
Maternal education:						
None	0.10	0.17	0.20	0.21	0.22	0.34
Some primary	0.11	0.15	0.16	0.20	0.18	0.25
Some secondary	0.04	0.08	0.11	0.09	0.14	0.11
Some further	0.00	0.03	0.07	0.05	0.08	0.09

Source: Calculations from the 1992/93 Integrated Household Survey.

Note: The above calculations use the proportion of children, who have since died, born to surviving mothers.

	Z-Scores					
	< -3	-3 to -2	-2 to -1	-1 to +1	+1 to +2	> +2
Male	23.0	20.7	24.2	24.7	4.5	2.8
Female	19.0	18.7	22.6	31.1	4.?	4.3
Urban	13.4	15.3	25.3	36.0	6.9	3.1
Rural	22.2	20.4	23.1	26.6	4.0	3.6
Expenditure quartiles:						
Bottom	23.0	21.2	21.5	26.0	4.8	3.5
Lower Middle	22.7	19.3	23.4	27.0	4.1	3.4
Upper Middle	20.1	20.2	24.8	28.2	3.5	3.2
Top	18.6	18.4	23.8	30.0	5.2	4.0
Age in years:						
Boys						
0	13.4	22.1	26.7	31.4	4.0	2.3
1	29.4	24.8	20.7	18.0	4.3	2.8
2	23.9	18.9	22.0	24.8	4.8	5.5
3	23.1	18.9	24.5	26.2	4.4	2.7
4	23.3	19.6	27.6	24.0	5.0	0.5
Girls						
0	11.0	12.7	27.5	39.6	4.9	4.2
1	20.5	20.4	25.9	26.6	2.5	3.9
2	19.6	19.9	19.1	31.2	4.7	5.5
3	19.0	20.7	22.9	28.9	4.3	4.1
4	23.0	17.8	20.9	29.1	5.2	3.9
Maternal education						
Illiterate	23.4	20.6	22.1	25.5	4.3	4.0
Literate, incomlete primary	21.0	20.2	24.7	27.5	3.6	3.1
Completed primary/some secondary	17.0	17.6	22.6	32.9	6.1	3.8
Completed further	..	7.9	12.9	79.2	..	..

Source: Calculations based on the 1992/93 Integrated Household Survey.

Note: The z-scores represent the distance of the relevant indicator from the mean of an international reference (American) population, measured in standard deviations of the reference population.

Formula for z-score: $(x - \mu)/s$

where: x = relevant indicator
μ = mean of reference population
s = standard deviations of reference population

Poor performance on this indicator is known as 'stunting'.

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	Z-Scores					
	< -3	-3 to -2	-2 to -1	-1 to +1	+1 to +2	> +2
Male	2.0	3.9	13.5	61.3	13.2	6.0
Female	1.5	3.6	15.0	60.8	13.1	5.9
Urban	3.4	3.2	12.4	58.9	13.7	8.3
Rural	1.5	3.9	14.5	61.4	13.1	5.6
Expenditure quartiles:						
Bottom	1.9	5.4	17.2	60.9	10.4	4.2
Lower Middle	2.0	4.8	14.2	60.5	12.9	5.5
Upper Middle	1.6	3.0	13.3	64.2	13.6	7.2
Top	1.6	2.2	12.4	61.6	15.4	6.7
Age in years:						
Boys						
0	3.1	3.4	8.9	48.3	20.6	15.6
1	1.7	7.1	20.9	49.8	14.7	5.6
2	2.0	2.9	10.9	70.1	11.5	2.5
3	2.3	2.3	13.1	67.5	11.7	3.1
4	1.0	4.1	13.2	65.2	10.4	6.9
Girls						
0	2.4	2.7	8.3	46.6	23.0	17.1
1	1.1	8.2	17.4	52.0	13.2	8.0
2	2.5	2.1	17.3	66.4	9.4	2.2
3	1.6	2.8	13.4	68.5	10.6	3.1
4	0.5	2.7	15.8	64.0	13.3	3.5
Maternal education						
Illiterate	1.9	4.0	14.3	62.1	12.1	5.6
Literate, incomlete primary	1.5	3.7	14.3	60.4	13.7	6.4
Completed primary/some secondary	2.3	3.5	13.9	60.2	14.3	5.9
Completed further	..	..	..	76.1	10.9	12.9

Source: Calculations based on the 1992/93 Integrated Household Survey.

Note: The z-scores represent the distance of the relevant indicator from the mean of an international reference (American) population, measured in standard deviations of the reference population.

Formula for z-score: $(x - \mu)/s$

where: x = relevant indicator
μ = mean of reference population
s = standard deviations of reference population

Poor performance on this indicator is known as 'wasting'.

CHILD NUTRITION: HEIGHT-FOR-AGE BY DISTRICT

TABLE X.5

	Z-Scores			
	Boys		Girls	
	< -3	-2 to -3	< -3	-2 to -3
Apac	27.2	15.5	15.8	24.5
Arua	33.2	16.4	26.5	15.9
Bundibugyo	35.6	24.6	30.0	18.3
Bushenyi	23.4	19.8	21.7	14.1
Gulu	14.1	15.2	18.5	14.0
Hoima	12.8	16.0	10.4	17.4
Iganga	27.6	19.1	18.5	22.3
Jinja	17.0	20.9	11.6	15.6
Kabale	24.0	30.0	17.3	21.1
Kabarole	22.6	32.6	18.2	19.8
Kalangala	17.5	24.5	7.6	16.0
Kampala	6.8	15.9	11.8	14.5
Kamuli	14.4	19.6	18.6	22.2
Kapchorwa	32.9	19.9	21.0	12.7
Kasese	33.4	24.5	38.0	17.6
Kibaale	18.4	17.8	12.3	13.1
Kiboga	31.2	12.7	8.5	17.6
Kisoro	13.3	6.8	20.2	22.1
Kitgum	27.9	23.3	23.0	29.0
Kotido	27.7	10.4	19.5	19.1
Kumi	29.4	37.6	22.1	30.9
Lira	18.0	21.6	13.0	17.6
Luwero	15.8	19.2	18.6	10.0
Masaka	22.4	20.8	16.6	25.5
Masindi	27.4	26.7	21.7	17.5
Mbale	21.6	21.8	24.0	22.8
Mbarara	29.4	18.5	23.9	15.7
Moroto	20.3	13.2	35.7	10.9
Moyo	26.7	9.8	33.6	12.2
Mpigi	28.2	20.5	19.2	19.9
Mubende	18.3	26.4	18.0	19.6
Mukono	23.0	23.3	7.2	16.0
Nebbi	30.0	16.8	21.5	22.7
Pallisa	20.9	18.4	33.0	21.3
Rakai	20.1	22.5	16.8	20.2
Rukungiri	31.8	15.5	15.9	18.9
Soroti	14.9	26.9	18.2	17.2
Tororo	26.5	23.3	18.3	16.7

Source: Calculations based on the 1992/93 Integrated Household Survey.

Note: The z-scores represent the distance of the relevant indicator from the mean of an international reference (American) population, measured in standard deviations of the reference population.

Formula for z-score: $(x - \mu)/s$

where: x = relevant indicator

μ = mean of reference population

s = standard deviations of reference population

Poor performance on this indicator is known as 'stunting'.

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PRIMARY SCHOOL ENROLLMENT **TABLE X.6**

	Population	Gross Enrollment	Enrollment Ratio
Total	3,848,651	3,513,695	0.91
Male	1,970,685	1,948,699	0.99
Female	1,877,966	1,564,996	0.83
Urban	408,574	420,599	1.03
Rural	3,440,077	3,093,096	0.90
Expenditure quartiles:			
Bottom	1,095,919	842,207	0.77
Lower Middle	992,994	884,244	0.89
Upper Middle	962,828	931,419	0.97
Top	796,910	855,825	1.07

Source: Calculations based on the 1992/93 Integrated Household Survey.

Notes: Gross enrollment figures include an unknown proportion of repeaters, hence the average attainment of children in primary education is much less than they suggest.

Both the public and private sectors are included in these calculations.

PRIMARY SCHOOL ENROLLMENT BY DISTRICT **TABLE X.7**

	Gross Enrollment Ratios		
	Male	Female	Total
Apac	1.01	0.57	0.78
Arua	1.34	0.78	1.07
Bundibugyo	0.83	0.74	0.78
Bushenyi	1.02	1.00	1.01
Gulu	1.23	0.83	1.00
Hoima	0.92	0.80	0.87
Iganga	0.91	0.88	0.90
Jinja	1.44	1.04	1.21
Kabale	0.95	0.79	0.89
Kabarole	0.90	0.86	0.88
Kalangala	1.24	1.05	1.14
Kampala	1.05	1.03	1.04
Kamuli	1.00	0.93	0.96
Kapchorwa	1.22	1.10	1.16
Kasese	0.89	0.72	0.82
Kibaale	0.84	0.65	0.76
Kiboga	0.86	1.03	0.92
Kisoro	0.82	0.63	0.73
Kitgum	1.27	0.71	0.99
Kotido	0.32	0.12	0.21
Kumi	1.12	0.87	1.00
Lira	0.95	0.72	0.85
Luwero	0.95	0.94	0.95
Masaka	0.95	0.97	0.96
Masindi	1.11	0.83	0.98
Mbale	1.05	0.87	0.96
Mbarara	0.99	0.94	0.96
Moroto	0.30	0.22	0.26
Moyo	0.95	0.71	0.83
Mpigi	1.08	0.97	1.03
Mubende	0.93	0.83	0.88
Mukono	0.87	0.84	0.85
Nebbi	0.62	0.55	0.59
Pallisa	0.94	0.81	0.89
Rakai	1.03	0.92	0.98
Rukungiri	1.07	0.89	0.98
Soroti	1.03	0.87	0.95
Tororo	1.09	0.84	0.96
Uganda	0.99	0.83	0.91

Source: Calculations based on the 1992/93 Integrated Household Survey.

Note: The above figures include both public and private education.

Gross enrollment figures include an unknown proportion of repeaters, hence the average attainment of children in primary education is much less than they suggest.

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SECONDARY SCHOOL ENROLLMENT **TABLE X.8**

	Population	Gross Enrollment	Enrollment Ratio
Total	2,302,584	303,099	0.13
Male	1,158,905	194,349	0.17
Female	1,143,679	108,750	0.10
Urban	293,786	87,946	0.30
Rural	2,008,798	215,153	0.11
Expenditure quartiles:			
Bottom	637,433	36,543	0.06
Lower Middle	548,832	56,222	0.10
Upper Middle	570,277	78,137	0.14
Top	546,042	132,197	0.24

Source: Calculations based on the 1992/93 Integrated Household Survey.

Notes: Gross enrollment figures include an unknown proportion of repeaters, hence the average attainment of children in primary education is much less than they suggest.

Both the public and private sectors are included in these calculations.

SECONDARY SCHOOL ENROLLMENT BY DISTRICT **TABLE X.9**

	Gross Enrollment Ratios		
	Male	**Female**	**Total**
Apac	0.09	0.00	0.04
Arua	0.15	0.10	0.13
Bundibugyo	0.25	0.00	0.11
Bushenyi	0.07	0.10	0.09
Gulu	0.11	0.06	0.09
Hoima	0.35	0.13	0.23
Iganga	0.14	0.02	0.08
Jinja	0.26	0.11	0.19
Kabale	0.20	0.09	0.15
Kabarole	0.11	0.07	0.09
Kalangala	0.00	0.00	0.00
Kampala	0.39	0.31	0.34
Kamuli	0.23	0.02	0.12
Kapchorwa	0.26	0.20	0.23
Kasese	0.20	0.04	0.13
Kibaale	0.06	0.00	0.03
Kiboga	0.14	0.11	0.13
Kisoro	0.16	0.04	0.10
Kitgum	0.09	0.02	0.05
Kotido	0.01	0.00	0.00
Kumi	0.13	0.23	0.18
Lira	0.11	0.07	0.10
Luwero	0.08	0.10	0.09
Masaka	0.09	0.09	0.09
Masindi	0.08	0.08	0.08
Mbale	0.18	0.17	0.18
Mbarara	0.15	0.08	0.11
Moroto	0.00	0.04	0.02
Moyo	0.30	0.04	0.19
Mpigi	0.32	0.15	0.24
Mubende	0.15	0.10	0.13
Mukono	0.13	0.09	0.11
Nebbi	0.17	0.03	0.09
Pallisa	0.20	0.11	0.16
Rakai	0.05	0.11	0.08
Rukungiri	0.19	0.00	0.12
Soroti	0.16	0.02	0.08
Tororo	0.24	0.08	0.16
Uganda	0.17	0.10	0.13

Source: Calculations based on the 1992/93 Integrated Household Survey

Note: The above figures include both public and private education.

Gross enrollment figures include an unknown proportion of repeaters, hence the average attainment of children in primary education is much less than they suggest.

PRIMARY SCHOOL ENROLLMENT BY AGE **TABLE X.10**

	Age of Population in Years						
	6	7	8	9	10	11	12
Total	753,506	545,017	577,591	536,764	488,753	377,753	569,267
Male	373,487	285,884	305,646	275,372	251,700	190,305	288,291
Female	380,019	259,133	271,945	261,392	237,053	187,448	280,976
Urban	79,899	60,533	60,812	56,369	52,314	50,178	48,469
Rural	673,607	484,484	516,779	480,395	436,439	327,575	520,798
Expenditure quartiles:							
Bottom	209,530	149,800	169,349	146,526	146,393	100,556	173,765
Lower Middle	212,000	145,217	140,210	140,184	128,484	85,469	141,430
Upper Middle	184,627	140,799	147,218	133,921	122,436	98,215	135,612
Top	147,349	109,201	120,814	116,133	91,440	93,513	118,460

	Gross Enrollment by Grade Level						
	P1	P2	P3	P4	P5	P6	P7
Total	781,647	710,315	633,847	454,260	386,226	290,183	257,217
Male	416,597	390,715	349,166	260,537	211,744	160,580	159,360
Female	365,050	319,600	284,681	193,723	174,482	129,603	97,857
	781,647	710,315	633,847	454,260	386,226	290,183	257,217
Urban	82,499	85,345	64,975	56,106	57,261	38,623	35,790
Rural	699,148	624,970	568,872	398,154	328,965	251,560	221,427
Expenditure quartiles:	781,647	710,315	633,847	454,260	386,226	290,183	257,217
Bottom	184,803	165,630	155,828	122,213	91,909	72,119	49,705
Lower Middle	210,220	173,012	163,724	108,615	100,169	63,565	64,939
Upper Middle	201,606	203,185	165,739	109,287	101,821	80,289	69,492
Top	185,018	168,488	148,556	114,145	92,327	74,210	73,081

	Gross Enrollment Ratios by Grade Level						
	P1	P2	P3	P4	P5	P6	P7
Total	1.04	1.30	1.10	0.85	0.79	0.77	0.45
Male	1.12	1.37	1.14	0.95	0.84	0.84	0.55
Female	0.96	1.23	1.05	0.74	0.74	0.69	0.35
Urban	1.03	1.41	1.07	1.00	1.09	0.77	0.74
Rural	1.04	1.29	1.10	0.83	0.75	0.77	0.43
Expenditure quartiles:							
Bottom	0.88	1.11	0.92	0.83	0.63	0.72	0.29
Lower Middle	0.99	1.19	1.17	0.77	0.78	0.74	0.46
Upper Middle	1.09	1.44	1.13	0.82	0.83	0.82	0.51
Top	1.26	1.54	1.23	0.98	1.01	0.79	0.62

Source: Calculations from the 1992/93 Integrated Household Survey.

SECONDARY SCHOOL ENROLLMENT BY AGE **TABLE X.11**

	Age of Population in Years					
	13	14	15	16	17	18
Total	414,999	403,399	371,713	371,653	297,205	443,615
Male	215,337	199,789	205,528	190,479	154,335	193,437
Female	199,662	203,610	166,185	181,174	142,870	250,178
Urban	52,550	41,499	47,122	46,124	48,912	57,579
Rural	362,449	361,900	324,591	325,529	248,293	386,036
Expenditure quartiles:						
Bottom	121,348	115,683	100,762	110,729	78,203	110,708
Lower Middle	99,071	103,236	90,874	85,306	72,086	98,259
Upper Middle	101,448	103,441	96,157	89,456	64,615	115,160
Top	93,132	81,039	83,920	86,162	82,301	119,488

	Gross Enrollment by Grade Level					
	S1	S2	S3	S4	S5	S6
Total	81,722	75,072	58,002	50,710	18,507	19,086
Male	45,573	48,543	36,774	35,547	12,630	15,282
Female	36,149	26,529	21,228	15,163	5,877	3,804
Urban	14,906	16,704	18,764	12,832	11,794	12,946
Rural	66,816	58,368	39,238	37,878	6,713	6,140
Expenditure quartiles:						
Bottom	13,918	7,556	7,518	5,174	559	1,818
Lower Middle	13,070	19,439	10,555	10,550	959	1,649
Upper Middle	25,486	19,509	12,385	13,226	3,578	3,953
Top	29,248	28,568	27,544	21,760	13,411	11,666

	Gross Enrollment Ratios by Grade Level					
	S1	S2	S3	S4	S5	S6
Total	0.20	0.19	0.16	0.14	0.06	0.04
Male	0.21	0.24	0.18	0.19	0.08	0.08
Female	0.18	0.13	0.13	0.08	0.04	0.02
Urban	0.28	0.40	0.40	0.28	0.24	0.22
Rural	0.18	0.16	0.12	0.12	0.03	0.02
Expenditure quartiles:						
Bottom	0.11	0.07	0.07	0.05	0.01	0.02
Lower Middle	0.13	0.19	0.12	0.12	0.01	0.02
Upper Middle	0.25	0.19	0.13	0.15	0.06	0.03
Top	0.31	0.35	0.33	0.25	0.16	0.10

Source: Calculations from the 1992/93 Integrated Household Survey.

EDUCATIONAL ATTAINMENT BY DISTRICT **TABLE X.12**
Percentage of Population over 16 Years of Age

	No Level Completed	P1 to P4	P5 to P7	S1 to S4	S5 to S7	Further	Proportion Literate
Kalangala	7.7	26.0	40.9	15.4	0.0	10.0	90.5
Kampala	5.6	12.1	31.2	30.7	6.7	13.8	91.8
Kiboga	24.2	33.4	31.2	9.2	0.6	1.5	68.7
Luwero	30.5	28.2	30.5	9.7	0.4	0.7	63.8
Masaka	28.4	30.8	29.0	9.6	0.6	1.6	68.8
Mpigi	16.7	20.1	35.0	19.0	2.8	6.4	80.1
Mubende	25.0	31.5	30.8	8.6	0.0	4.0	72.5
Mukono	31.3	25.1	28.8	11.8	0.7	2.3	60.5
Rakai	33.4	30.5	26.4	8.0	0.3	1.3	60.8
Iganga	38.1	19.5	30.3	9.5	0.4	2.3	54.6
Jinja	17.9	22.4	31.4	20.7	1.7	5.9	76.8
Kamuli	37.7	24.2	25.2	10.4	0.1	2.3	56.0
Kapchorwa	29.9	11.7	39.3	14.1	1.7	3.1	60.7
Kumi	38.3	21.1	26.5	9.8	0.1	4.1	55.1
Mbale	31.2	22.4	31.7	12.1	0.7	2.0	59.0
Pallisa	36.8	26.0	24.7	10.0	0.4	2.0	56.1
Soroti	38.6	23.8	25.8	6.8	0.4	4.5	50.8
Tororo	32.5	21.1	30.4	12.2	0.1	3.6	58.6
Bundibugyo	38.9	25.7	25.4	7.8	0.2	1.9	54.9
Bushenyi	41.4	26.2	22.6	7.3	0.6	2.0	56.6
Hoima	30.2	27.1	30.0	11.2	0.1	1.3	65.5
Kabale	36.0	21.1	28.5	8.9	1.4	4.0	65.8
Kabarole	39.0	26.8	25.1	6.8	0.3	2.0	55.7
Kasese	35.5	21.6	28.3	10.8	0.4	3.4	58.9
Kibaale	47.5	26.3	22.9	2.9	0.3	0.0	50.2
Kisoro	50.1	19.0	20.5	6.4	0.0	4.0	51.8
Masindi	39.0	26.3	25.4	8.1	0.3	0.8	57.3
Mbarara	39.3	23.3	27.1	7.6	0.3	2.4	58.8
Rukungiri	35.3	26.8	28.6	6.5	0.7	2.0	62.8
Apac	29.1	20.4	39.0	9.2	0.4	1.9	66.2
Arua	41.0	22.5	23.9	9.7	0.8	2.1	49.5
Gulu	33.7	24.0	30.5	8.7	0.3	2.7	61.3
Kitgum	41.7	22.2	29.3	5.1	0.6	0.9	52.2
Kotido	73.4	14.7	10.2	1.1	0.0	0.6	22.5
Lira	36.0	19.3	29.2	11.1	1.1	3.2	56.9
Moroto	75.7	9.1	7.1	4.5	0.0	3.5	20.8
Moyo	36.9	19.8	25.7	16.0	0.3	1.2	55.6
Nebbi	37.9	28.9	25.7	6.4	0.0	1.1	52.2

Source: Calculations from the 1992/93 Integrated Household Survey.

Note: Literacy means reading and writing.

MEDICAL TREATMENT DURING THE LAST 30 DAYS **TABLE X.13**
In Percent

	Expenditure Quartile			
	Bottom	Lower Middle	Upper Middle	Top
None	83.9	79.8	78.1	77.8
Home treatment	7.2	8.3	8.5	6.7
Outpatient government hospital/clinic	3.6	4.4	4.3	3.6
Outpatient private hospital/clinic	3.7	5.2	7.0	9.2
Private doctor	0.3	0.7	0.6	1.1
Pharmacy	0.3	0.4	0.4	0.5
Traditional doctor	0.5	0.6	0.5	0.3
Inpatient government hospital/clinic	0.2	0.3	0.2	0.3
Inpatient private hospital/clinic	0.2	0.2	0.3	0.5
Other	0.0	0.1	0.1	0.1

Source: 1992/93 Integrated Household Survey.

DISTRIBUTION OF TYPES OF SCHOOLS ATTENDED WITHIN EACH EXPENDITURE QUARTILE **TABLE X.14**

	P1 to P4	P5 to P7	S1 to S4	S5 to S6	Further
Bottom quartile	100.0	100.0	100.0	100.0	100.0
None	85.9	95.3	99.3	100.0	100.0
Govt managed, costs shared	10.1	3.9	0.5	0.0	0.0
Govt financed and managed	1.0	0.2	0.1	0.0	0.0
Govt finance, non-profit managed	0.9	0.2	0.0	0.0	0.0
Non-profit financed and managed	1.3	0.2	0.0	0.0	0.0
Private commercial	0.8	0.2	0.1	0.0	0.0
Lower middle quartile	100.0	100.0	100.0	100.0	100.0
None	85.3	94.9	98.8	100.0	99.9
Govt managed, costs shared	10.8	4.2	1.0	0.0	0.1
Govt financed and managed	0.6	0.2	0.1	0.0	0.0
Govt finance, non-profit managed	0.5	0.3	0.0	0.0	0.0
Non-profit financed and managed	2.0	0.3	0.1	0.0	0.0
Private commercial	0.8	0.1	0.0	0.0	0.0
Upper middle quartile	100.0	100.0	100.0	100.0	100.0
None	84.7	94.3	98.5	99.9	100.0
Govt managed, costs shared	10.2	4.3	1.1	0.1	0.0
Govt financed and managed	0.9	0.4	0.1	0.0	0.0
Govt finance, non-profit managed	0.7	0.2	0.1	0.0	0.0
Non-profit financed and managed	2.3	0.4	0.1	0.0	0.0
Private commercial	1.2	0.4	0.1	0.0	0.0
Top quartile	100.0	100.0	100.0	100.0	100.0
None	86.2	94.6	97.5	99.5	99.5
Govt managed, costs shared	9.0	4.1	1.6	0.4	0.1
Govt financed and managed	0.9	0.5	0.2	0.0	0.1
Govt finance, non-profit managed	0.6	0.2	0.1	0.0	0.0
Non-profit financed and managed	1.8	0.2	0.3	0.0	0.1
Private commercial	1.5	0.4	0.3	0.1	0.2

Source: Calculations from the 1992/93 Integrated Household Survey.

Notes: The code for 'government managed and costs shared' seems also to have been used for missing observations, so that the public sector may be overstated.

To avoid double-counting, children away for over 6 months are not included in the household, so that boarding schools, which are mainly in the private sector, may be underestimated.

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DISTRIBUTION OF EXPENDITURE QUARTILES WITHIN EACH SCHOOL TYPE **TABLE X.15**

	P1 to P4	P5 to P7	S1 to S4
All schools	100.0	100.0	100.0
Bottom quartile	24.4	22.9	12.9
Lower middle quartile	25.4	24.5	20.2
Upper middle quartile	26.3	26.9	26.6
Top quartile	23.9	25.7	40.3
Government managed, costs shared	100.0	100.0	100.0
Bottom quartile	25.2	23.8	12.8
Lower middle quartile	26.9	25.7	22.7
Upper middle quartile	25.4	25.9	26.9
Top quartile	22.6	24.6	37.6
Government financed and managed	100.0	100.0	100.0
Bottom quartile	28.9	17.9	16.8
Lower middle quartile	18.7	18.0	18.5
Upper middle quartile	27.1	29.6	31.1
Top quartile	25.3	34.5	33.6
Government financed, non-profit managed	100.0	100.0	100.0
Bottom quartile	34.2	28.6	11.8
Lower middle quartile	16.4	29.0	9.3
Upper middle quartile	26.1	17.7	43.2
Top quartile	23.2	24.7	35.7
Non-profit financed and managed	100.0	100.0	100.0
Bottom quartile	17.3	14.7	2.7
Lower middle quartile	27.7	26.3	18.5
Upper middle quartile	30.7	38.5	16.1
Top quartile	24.3	20.4	62.7
Private commercial	100.0	100.0	100.0
Bottom quartile	18.0	17.7	16.6
Lower middle quartile	19.1	8.9	7.9
Upper middle quartile	27.7	35.9	23.7
Top quartile	35.2	37.5	51.7

Source: Calculations from the 1992/93 Integrated Household Survey.

Notes: The sample size is too small above the lower secondary level for the data to make much sense, hence only P1 to P4, P5 to P6 and S1 to S4 are shown.

The code for 'government managed and costs shared' seems also to have been used for missing observations, so that the public sector may be overstated.

To avoid double-counting, children away for over 6 months are not included in the household, so that boarding schools, which are mainly in the private sector, may be underestimated.

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PRIMARY SCHOOL ENROLLMENT BY DISTRICT AND BY SEX TABLE X.16
Headcount as of May 17, 1994

	Female	Male	Total
Eastern Region	*287,238*	*338,527*	*625,765*
	46%	*54%*	*100%*
Kamuli	26,764	29,598	56,362
Iganga	55,473	61,900	117,373
Tororo	33,604	42,102	75,706
Mbale	58,627	63,669	122,296
Kapchorwa	10,173	11,988	22,161
Kotido	9,463	12,052	21,515
Kumi	17,458	22,929	40,387
Jinja	19,850	20,580	40,430
Moroto	3,863	4,819	8,682
Soroti	33,576	46,723	80,299
Pallisa	18,387	22,167	40,554
Northern Region	*160,967*	*273,663*	*434,630*
	37%	*63%*	*100%*
Apac	29,348	46,862	76,210
Lira	28,761	49,763	78,524
Gulu	24,880	37,916	62,796
Kitgum	21,127	41,475	62,602
Nebbi	13,901	23,965	37,866
Moyo	6,426	10,579	17,005
Arua	36,524	63,103	99,627
Western Region	*300,275*	*341,485*	*641,760*
	47%	*53%*	*100%*
Masindi	15,808	18,485	34,293
Bushenyi	41,821	44,395	86,216
Rukungiri	33,621	35,473	69,094
Bundibugyo	6,154	9,008	15,162
Kabale	31,290	35,683	66,973
Mbarara	54,330	58,759	113,089
Kabarole	36,957	42,600	79,557
Kasese	22,179	27,079	49,258
Hoima	16,716	18,037	34,753
Kibale	17,467	20,505	37,972
Kisoro	8,105	12,837	20,942
Ntungamo	15,827	18,624	34,451
Central Region	*310,824*	*311,204*	*622,028*
	50%	*50%*	*100%*
Mpigi	65,310	64,905	130,215
Mubende	32,633	34,041	66,674
Masaka	45,956	44,955	90,911
Rakai	32,718	33,256	65,974
Luwero	31,952	33,151	65,103
Mukono	56,714	57,141	113,855
Kampala	36,651	34,247	70,898
Kalangala	844	837	1,681
Kiboga	8,046	8,671	16,717
Uganda	*1,059,304*	*1,264,879*	*2,324,183*
	46%	*54%*	*100%*

Source: Ministry of Education and Sports.

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STUDENT ENROLLMENT IN EDUCATIONAL INSTITUTIONS **TABLE X.17**
1993/94

PRIMARY		2,389,227
SECONDARY		260,000
TERTIARY		15,901
64 Primary Teachers Colleges (PTCs)	18,349	
10 National Teachs Colleges (NTCs)	7,000	
4 Uganda Technical Colleges (UTCs)	1,588	
5 Uganda Colleges of Commece (UCCs)	2,264	
30 Technical Institutes (TIs)	8,000	
25 Technical Schools (TSs)	6,500	
1 Uganda Polytechnic Kyambogo (ITEK)	700	
1 National College of Business Studies, Nakawa	1,500	
UNIVERSITIES		8,310
Makerere	7,000	
Mbarara	260	
Institute of Teacher Education, Kyambogo	1,050	
TOTAL		2,703,438

Source: Ministry of Education and Sport.

Note: The primary enrollment data are available by region from different sources.

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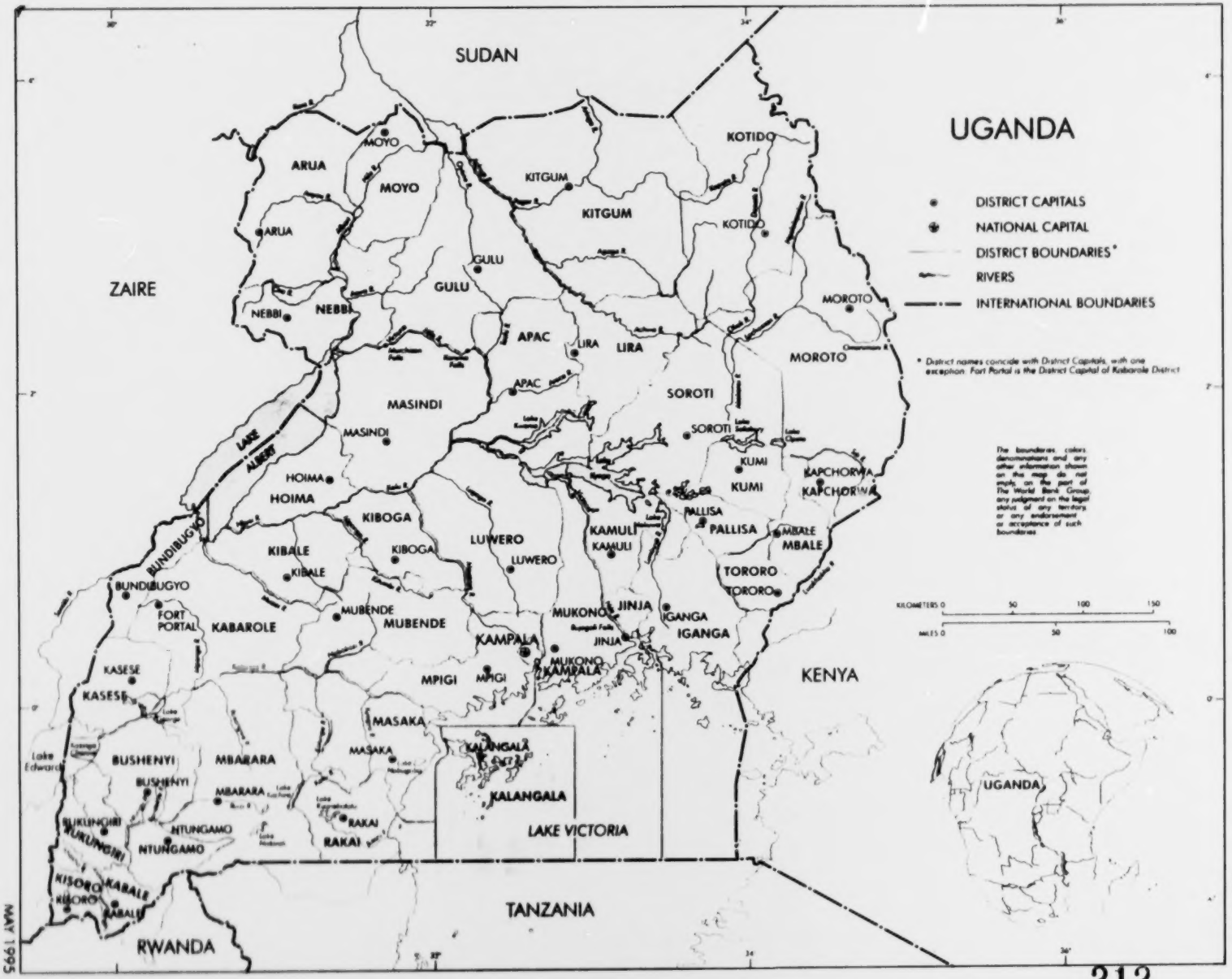

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